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CONTENTS

THE TEMPLE OF CASTOR IN THE FORUM ROMANUM

(Plates I—XX)

1. *The Problem*

It is one of the paradoxes of the study of Roman architecture that what, in terms of the written record, is probably the most thoroughly and reliably documented phase of its whole development, the Augustan age, is from the point of view of the architectural historian still one of the most obscure and controversial. That it was a vital turning point in the history of Roman architecture one cannot doubt; and yet the number of monuments in the capital that can be accepted without hesitation and without reservation as representative of the age is very limited. No doubt the full and critical publication of the excavations of the last few decades will increase the number and provide a firm basis for further studies. But in the meantime we are still dependent—all too dependent—upon those few buildings which are securely and unequivocally Augustan, and which may be used therefore as a safe standard of comparison for some at any rate of the architectural practices current in Augustan Rome.

Among these was until recently the Temple of Castor and Pollux (for brevity usually referred to in antiquity as the Temple of Castor, or of the Castores) in the Forum Romanum, the three standing columns of which were a familiar feature of the Roman landscape long before the placid contours of the Campo Vaccino gave place to the remains of classical antiquity hidden beneath it. The first serious student of the building after its excavation, Richter (whose survey and restoration are still the best available)[1] and Hülsen,[2] suggested that the superstructure (and, in the case of Richter, substantial parts of the podium also) was due to an otherwise unrecorded Trajanic or Hadrianic reconstruction. Since then, however, it has been agreed by most competent students that the podium, in the form in which we see it, and the superstructure are both those of the building which Tiberius is recorded as having built and dedicated in his own name and that of his brother

For acknowledgments, see p. 30.

[1] O. Richter, 'Der Castortempel am Forum Romanum' in *JdAI*, xiii, 1898, pp. 87–114.

[2] Ch. Hülsen, *The Roman Forum* (2nd ed.), Rome, 1909, p. 161.

Drusus in A.D. 6.[3] In the case of the podium, this opinion is based on the analyses of the surviving structure by Van Buren[4] and Tenney Frank,[5] who were able to demonstrate that the substantial remains of two earlier buildings incorporated within it were those of the original temple of 484 B.C. and of its successor, built by L. Metellus Dalmaticus in 117 B.C.; and in particular that the remains of a mosaic pavement found within the cella at a level below that of the present stylobate were not of Tiberian (as Richter and Hülsen thought) but of Metellan date. The superstructure has never received the same detailed attention as the platform on which it stands. But, in the absence of any trace either of repairs and adjustments or of any alternative architectural scheme, it has been generally assumed to be contemporary with the podium. Amid the shifting sands of critical scholarship, here at least has been thought to be a monument of securely Augustan date and character.

This assumption was first seriously questioned by Bartoli in his publication of the fragments of the dedicatory inscription,[6] and again by von Blanckenhagen in a footnote to his valuable pioneer work on Flavian architecture,[7] in which he suggested that the standing columns and entablature might be early Trajanic or even Antonine. It remained, however, for von Gerkan[8] to state a reasoned case against the traditional date. His arguments may be summarised briefly as follows:

1. The literary record is notoriously incomplete (*cf.* the Temple of Venus Genetrix, now known from a fragment of the Fasti Ostienses[9] to have been dedicated in A.D. 113). By no means all the surviving buildings recorded as having been built or restored by Augustus are in fact his work.

2. The hybrid column-base, with two scotiae instead of the single scotia of the normal Attic column-base of Roman practice, is not an early form. It is, however, found in the late first and early second centuries in buildings such as the Arch of Titus, the Forum of Nerva and the Pantheon (Von Gerkan, p. 200).

3. The capitals [illegible] different from those of the Temple of Mars Ultor that they cannot possibly be contemporary; they must (p. 203) be the result of a long intervening period of development.

4. The broad, rectangular soffit-panel of the architrave is another late feature. Soffit-panels occupying a third, or more, of the available breadth of the architrave first appear in Flavian baroque; at that period a semi-circle is usually left uncarved at either end of the panel to accommodate the rosette on the abacus of the capital. Plain rectangles must be even later, as on the Pantheon (p. 203).

5. The entablature cannot be a mere eight years later than Mars Ultor, with which it corresponds neither in proportions nor in construction and in the details and richness of the ornament. Specific points of contrast mentioned

[3] Suet. *Tib.* 20; Dio, lv, 27, 4.
[4] A. W. van Buren, in *Classical Review*, 1906, pp. 77–82.
[5] Tenney Frank in *MAAR*, v, 1925, p. 79 ff.
[6] *Not. Scav.*, 1927, pp. 289–297.
[7] P. H. von Blanckenhagen, *Flavische Architektur und ihre Dekoration*, Berlin, 1940, p. 89, note 19.
[8] A. von Gerkan, 'Einiges zur Aedes Castoris in Rom' in *Röm. Mitt.*, 60–61, 1953–54, pp. 200–206.
[9] *Not. Scav.*, 1932, p. 188 ff.

are: the decoration of the second fascia of the architrave and the backward slope of the lowest fascia; the carving of the cymation over the frieze on the same block ■ the dentils and the fact that the cornice is made up of two blocks, not three; and the richly decorated S-curved consoles, as against the simpler and plainer 'Balkenkonsole' of Mars Ultor. Other features claimed as indicating ■ post-Augustan date are the low proportions of the sima and the purely decorative use of the lions' heads (both of which are said to be unlikely before Flavian times) and the proportionately large scale of the intermediate mouldings in terms of the main members. Von Gerkan also notes a marked vertical concordance between the component units in the various mouldings of the entablature; this 'academic' approach, though it does not suggest to him precise grounds for dating, influences his choice of the Trajanic rather than the Augustan period (p. 204).

6. The striking coincidence in the phraseology used by Suetonius (*Tib.* 20) and Cassius Dio (55, 27) in referring to this temple may be reasonably taken to suggest that the words of the original Tiberian dedication were still visible in the second half of the second century (pp. 204-5).[10] The surviving remains of the dedicatory inscription are fragmentary in the extreme; but two facts are certain, namely that it was of considerable length, occupying both frieze and architrave, and that it ended with the letters EF, presumably from the word [R]EF(ecit).[11] Since in von Gerkan's opinion the word REFECIT could not possibly have been used of so complete a rebuilding as that undertaken by Tiberius, it follows that it was the last word of a long inscription which not only repeated the terms of the original Tiberian rebuilding but also recorded the circumstances of a later restoration. It would have been entirely out of character for Domitian to have thus recorded the work of a predecessor, but very much in character for Hadrian,[12] or Trajan. Von Gerkan concludes that the building dates from the early Trajanic period and represents the classicism of Apollodorus in reaction to the baroque Flavian decoration.

Von Gerkan's thesis has since been amplified in one important point, the decoration of the architrave soffit, by Wegner.[13] Wegner rests his argument on the assumption that the broad soffit, about two-thirds of the total width of the architrave, cannot be earlier than Flavian. He finds that the closest dated parallel is the soffit of the Temple of Vespasian and, while recognising important differences between the two, concludes that they cannot be far different in date. He reads the style as modified Flavian with a tendency towards 'trajanische Abstraktion und Verhärtung.' Wegner thus reaches, broadly speaking, the same conclusion as von Gerkan.

With so much learned opinion ranged in favour of dating the Temple of Castor to the Flavian-Trajanic period, those who still believe in the traditional Augustan dating are clearly under obligation to restate the reasons for their belief. Before doing so, however, and before setting out the detailed arguments in favour of an

■ G. Tomassetti in *Bull. Com.*, 1890, pp. 209 ff.
[10] Bartoli, *loc. cit.* (n. 6).
[11] SHA, *Hadr.*, 19.
[12] M. Wegner, *Ornamente kaiserzeitlicher Bauten Roms: Soffiten*, Cologne, 1957, p. 100 ff.

Augustan date, attention must be called to one problem of a more general character. Underlying a great deal of von Gerkan's argument is the assumption that there exists a single Augustan style, to which all buildings of the period are bound to conform and of which the Temple of Mars Ultor may be taken as representative. Is this assumption in fact justified? To many, including the present writers, the Augustan period appears rather ■ one of very rapid development, within which one can detect a surprising variety of different, and at times conflicting, styles. The Forum of Augustus and the Temple of Mars Ultor represent one such style and a very important one, namely that which came under very strong influence from the buildings of classical Athens. But it was not alone, and it stands in sharp contrast to the rich ornament of several other near-contemporary buildings, which constitutes a hardly less important aspect of contemporary architectural taste.

Which of these two views presents the truer picture of the architecture of the Augustan age is a large question, and one that is not likely to be resolved by the analysis of any single building. Such analysis is, however, almost bound to be revealing; and since the date of the Temple of Castor has been called in question, it may be taken as a test-case. The notes that follow are offered in the hope that they may also serve as a useful basis for other wider studies of the architectural ornament of the Augustan and early Imperial age.

The following late Republican and early Imperial buildings are frequently referred to in the discussion that follows. The dates are those generally accepted or, in controversial cases, those assigned by the present writers. The bibliography in each case includes the ■■■ important works in which ■ controversial date is discussed, or in which fragments of decoration are illustrated.

Temples A and B ('The Round Temple') in the Largo Argentina; early first century B.C. G. Marchetti Longhi, *L'Area Sacra ad i Templi Repubblicani del Largo Argentina*, Rome, 1930; G. Lugli, *I Monumenti Antichi di Roma e Suburbio*, iii, 1938, pp. 27–36. Marchetti Longhi in *Bull. Com.*, lxxvi, 1956–58, p. 45 ff.

The Round Temple by the Tiber. The original building was erected not later than the ■■■iddle of the first century B.C., although there are some later, probably Julio-Claudian, repairs; see D. E. Strong and J. B. Ward Perkins in *PBSR*, xxviii, 1960, pp. 7–32. The main earlier studies are W. Altmann, *Die italische Rundbauten*, Berlin, 1906, pp. 22–30 (giving the earlier literature); R. Delbrueck, *Hellenistische Bauten in Latium*, ii, 1912, pp. 43, 58; G. Lugli, *Roma Antica: il Centro Monumentale*, Rome, 1946, pp. 579–582 (with full bibliography). For the capitals, see also M. Gütschow in *JdAI*, xxxvi, 1921, pp. 66–71 and G. Carafla, *Il Tempio detto di Vesta*, Rome, 1948.

The Temple of Divus Julius; begun after 42 B.C. and dedicated in 29. For the entablature, see F. Toebelmann, *Römische Gebälke*, i, p. 5 and fig. 7; for the capitals, H. Kähler, *Die römischen Kapitelle des Rheingebietes*, Berlin, 1939, Beil. 2, figs. 8 and 10.

The Regia; around 36 B.C. Hülsen, *JdAI*, iv, 1889, pp. 228–253; Toebelmann, *op. cit.*, pl. I and figs. 3, 4, ■ and 9. For the archaeology of the building, see F. Brown in *MAAR*, xii, 1935, pp. 67–88.

The Temple of Apollo Palatinus; begun in 36 B.C. and dedicated in 28. The most recent study of the building and its identification is by G. Lugli in *Atti Accad. Naz. di S. Luca*, i (n.s.), 1951–52, pp. 26–55. For the capitals, see also Kähler, *op. cit.*, Beil 2, fig. 4.

The Temple of Saturn; early 20's B.C. Built with the spoils of Plancus's Gallic triumph and after his second acclamation as imperator (*CIL*, vi, 1316: 'L. Plancus L.f. cos imp. iter. de manib'.), it was evidently completed before he held the censorship in 22 B.C. The second acclamation is variously ascribed to 40 B.C. (*Coins of the Roman Republic in the B.M.*, ii, pp. 496–7) and to 34 B.C. (Borghesi, *Opera*, ii, p. 285; *cf.* G. Q. Giglioli, *Architettura ed Arti Decorative*, i, 1921–22, pp. 516–522). The most likely date for the building is after Plancus's reconciliation with Octavian in 31 B.C.; in the immediately preceding years he was almost continuously in the East. For the entablature, see Toebelmann, *op. cit.* p. 5 and fig. 6.

The Arch of Augustus at Rimini; *c.* 27 B.C. G. A. Mansuelli, *Ariminum*, Rome, 1941, pp. 78–82, and *Il Monumento Augusteo del 27 a.C.* (reprinted from *Arte Antica e Moderna*, nos. 8 and 9),

Bologna, 1960, in both cases with earlier literature. For drawings of the architectural detail, see L. Rossini, *Gli Archi Trionfali*, 1836, pl. XIII. As the arch was the counterpart of one erected in the city of Rome, it may be considered as fully representative of architecture in the capital.

The Arch of Augustus in the Forum Romanum; identified as the Parthian Arch, erected after 20 B.C. A publication following recent excavations (see *Arch. Anz.*, 1957, cols. 146 ff.) is awaited; some fragments of the entablatures were attributed to the Regia by Fiechter in Toebelmann, *op. cit.*, pp. 1–12. For an attempted reconstruction of the Arch, see *Rend. Pont. Accad.*, xxi, 1945–46, pp. 57–100.

The Temple of Apollo *in Circo* (Apollo Sosianus); of approximately the same date as the Arch of Augustus, perhaps a little later. *Bull. Com.*, lxviii, 1940, pp. 9–40. The date proposed by those who believe that the building was restored by C. Sosius between 34 and 31 B.C. is much too early (see Kähler, *op. cit.*, p. 11).

The Basilica Aemilia, the larger order; *c.* 14 B.C. The building has not been published since Boni's excavations. The present writers distinguish architectural ornament of two different periods among the surviving fragments. The larger, Ionic (?) order should be attributed to the restoration after the fire of 14 B.C. (Dio, liv, 24); the smaller, Corinthian order to the restoration carried out in A.D. 22 (see below, note 16). The well-known frieze, briefly published in *Boll. d'Arte*, xxxv, 1950, pp. 289–294, belongs to the lower, larger order.

The Ara Pacis; 13–9 B.C. G. Moretti, *L'Ara Pacis Augustae*, 2 vols., Rome, 1948.

The Forum of Augustus; completed *c.* 2 B.C. The only useful publications are by C. Ricci in *Capitolium*, vi, 1930, pp. 157–189 (also published separately) and G. Fiorini, *La Casa dei Cavalieri di Rodi al Foro di Augusto*, Rome, 1951. The Temple of Mars Ultor was completed in 2 B.C. (Suet., *Div. Aug.* 29, 1; Dio, lv, 10); it is not known when it was begun.

The Temple of Magna Mater, on the Palatine; restored *c.* A.D. 3. It was restored by Augustus (*Mon. Anc.* 19.2); see also *Röm. Mitt.*, x, 1895, pp. 1–28.

The Temple of Concord; dedicated *c.* A.D. 10. Dio (lvi, 25) gives A.D. 10 as the date of the dedication; Suetonius (Tib. 20) A.D. 12. Tiberius had undertaken to restore the building in 7 B.C. (Dio lv, 8, 2) but it is unlikely that much work was done before A.D. 4. For the architecture see *MAAR*, v, 1925, pp. 53–77; and for the entablature, especially Toebelmann, *op. cit.*, pp. 42–51 and pl. IV.

The Temple of Rome and Augustus, Ostia; Tiberian. The building is unpublished; for the date see *Ostia*, i, p. 191.

The Basilica Aemilia, smaller order; *c.* A.D. 22. A restoration of the building in A.D. 22 is referred to by Tacitus, *Annales*, iii, 72. This date suits the style of the ornament very well.

The two Ionic temples below S. Nicola in Carcere (Forum Holitorium); both presumably damaged in the fire of 31 B.C. and restored, possibly after a considerable interval, quite late in the reign of Augustus; see below, p. 8. R. Delbrueck, *Die drei Tempel am Forum Holitorium*, Rome, 1903. For drawings of the architecture, see L. Canina, *Gli Edifizi di Roma Antica*, ii, Rome, 1856, pl. XXXIX.

2. *The Column-bases*

The normal type of column-base in use in Imperial Rome was the Attic base, a substitute for the more elaborate Ionic base which was evolved in fifth-century Athens, well-known early examples being the Temple of Nike and the Erechtheum. This form, which is too familiar to require detailed illustration, consists essentially of two swelling torus-mouldings separated by the counter-curve of a deep, rounded scotia; the upper torus was normally smaller than the lower, which either rested directly on the stylobate or else, by Hellenistic times, might include a low rectangular plinth, carved either separately or in one piece with the rest of the base.

The bases of the Temple of Castor (fig. 1,2; pl. II, *b*) are more elaborate. The proportions are taller, and in place of the single scotia there are two, separated by a projecting moulding. As is usual during the Empire the column-base is carved separately from the column instead of, as regularly in Republican times, incorporating the moulding at the foot of the column and a short section of the

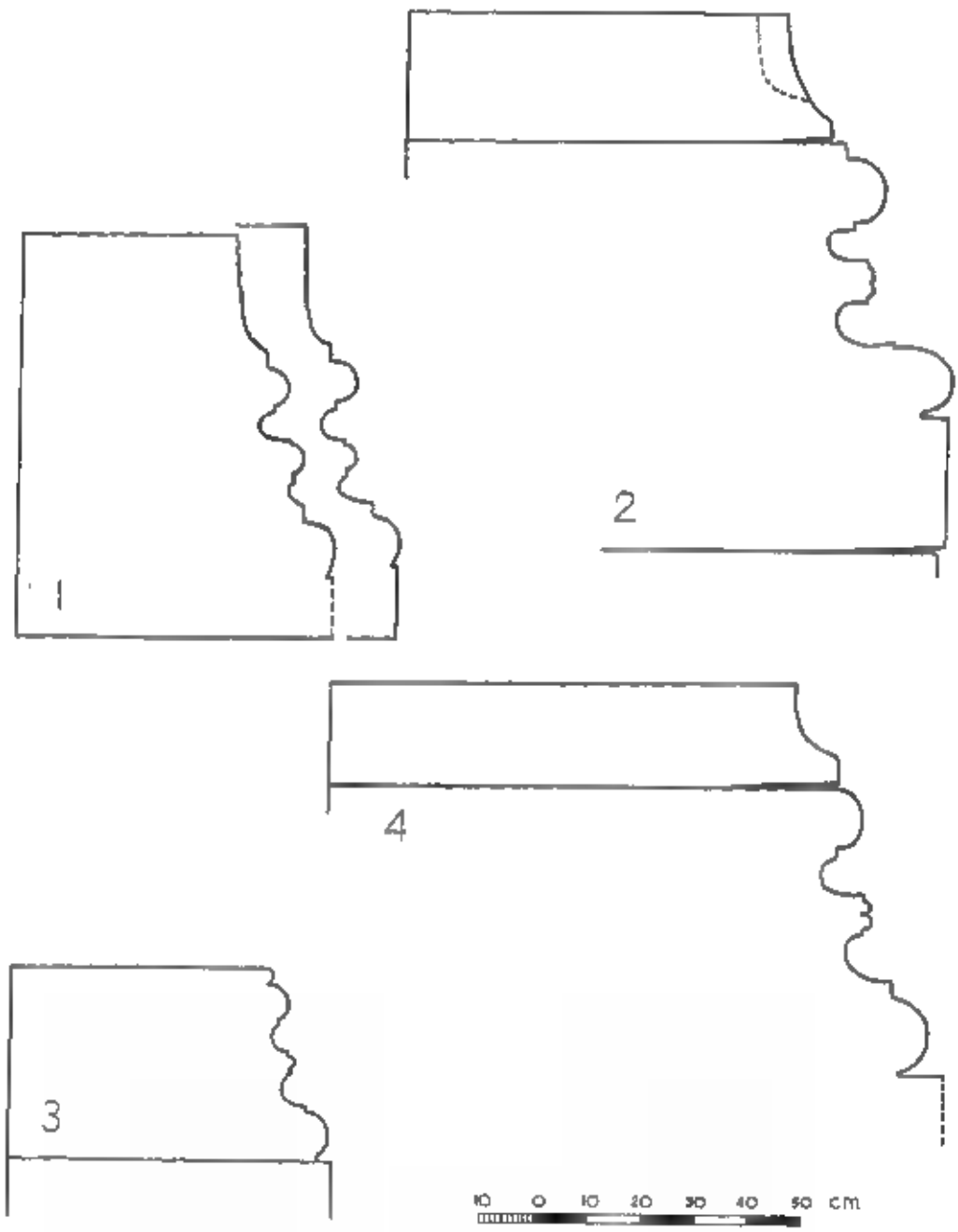

Fig. 1. Column-Bases. 1, The North Temple under S. Nicola in Carcere. 2, Temple of Castor. 3, Ostia, Temple of Rome and Augustus. 4, Temple of Vespasian.

fluting. It is, on the other hand, carved in one piece with a tall (25 cm.) plinth, about half of which would have been invisible below pavement-level, resting as it did directly on the top block of the travertine pier which carried the whole weight of the column.

The form is a distinctive one and, though not as common as the simple Attic base with a single scotia, it was extensively used in Imperial monuments of the first and second centuries A.D. The following is a list of examples from well-dated monuments in or near Rome:

Augustan: The Temple of Saturn (fig. 2,4; pl. IX, *b*). See below, p. 11.
The Temple of Apollo *in Circo*.
The decorated interior orders of the temples of Mars Ultor (*PBSR*, ii, 1904, no. 124, *b*, after Coner) and of Concord (*MAAR*, v, 1925, pl. 48.2).

Tiberian: The Temple of Rome and Augustus at Ostia (fig. 1,3).
The Temple of Rome and Augustus at Terracina.

Neronian: Domus Transitoria: the nymphaeum beneath the great triclinium of the Flavian Palace (G. Carettoni, *Not. Scav.*, 1949, p. 56, fig. 9).
Domus Aurea: the portico along the façade of the main domestic wing.

Flavian: The Temple of Vespasian (fig. 1,4).
The Arch of Titus.
The main porch of the Stadium Domitiani (A. M. Colini, *Stadium Domitiani*, 1943, pls. IV, XXII).
The decorated interior order of the Temple of Venus Genetrix, both *in situ* and as reused by Sixtus III in the baptistery of S. Giovanni in Laterano (R. Naumann, *Der Quellbezirk von Nimes*, 1937, figs. 50, 51; G. B. Giovenale, *Il Battistero Lateranense*, 1929, figs. 84, 85; H. Kähler, *Röm. Mitt.* lii, 1937, pp. 106-118; *cf. PBSR*, ii, 1904, no. 132, after Coner).

Trajanic: The Basilica Ulpia.

Hadrianic: The Pantheon.

The above list, which is in no sense exhaustive, is quite sufficient to refute von Gerkan's contention that the use of the double scotia in the Temple of Castor is an indication of post-Augustan date. On the contrary, bases of this form are to be found in monuments of all dates from the beginning of the principate of Augustus onwards, being particularly common, it seems, in monuments erected under more or less direct Imperial inspiration. The distinction between these and the ordinary Attic bases, which are used in countless contemporary monuments, including the main order of the Augustan Temple of Mars Ultor, is one not of date, but of taste and architectural usage.

The double-scotia base is usually regarded as a hybrid form, derivative in part from Ionic and in part from Attic prototypes. This may well be true. But it

does not necessarily follow that the architects of Augustan Rome adopted it ready made from the Hellenistic world. It does not seem to be found at all in mainland Greece; and in Asia Minor, where one would perhaps more naturally look for such a hybrid form, there is the solitary and rather unsatisfactorily documented example of the Temple of Apollo Smintheus in the Troad.[14] Derivative Ionic bases were in occasional use in the Asiatic provinces as late as the second century A.D.,[15] and the rather squatter proportions and projecting lower members of these later examples[16] may well be due to the influence of the Attic form. By the time of Augustus, however, the normal form both in Greece and in Asia Minor was the straightforward Attic base, with or without a plinth, and the double-scotia base is so rare that one would be tempted to assign any occurrence of it to reverse influence from the capital rather than to any lingering local tradition.

It is to Republican Italy, therefore, that one has to look for the immediate source from which the Augustan examples in Rome were derived. Here in central Italy, even at the most conservative estimate of Republican architectural chronology, the Attic base can be seen to have been well established by the second half of the second century B.C. The proportions are very varied. At one end of the scale there is a tall form with two tori of almost equal projection and a relatively insignificant scotia, a form for which the second phase of Temple D on the acropolis at Cosa (early first century B.C.) offers a conveniently illustrated and well dated example;[17] and at the other, the low proportions and narrow, slit-like scotia of the building on the platform of the acropolis at Ferentinum, which is conventionally dated to the early first century B.C., but which has recently been claimed as being almost a century earlier.[18] On the whole, the tendency is towards the latter extreme (*e.g.* the two temples at Tivoli, and the Temple of Fortuna at Praeneste, *passim*). With a few exceptions due to special circumstances, the regular practice throughout the series is to treat the lower torus as the springing-point of the whole columnar system, resting directly on the stylobate or pavement without any intervening plinth.

In addition to the more or less conventional Attic series, however, there are a certain number of monuments in the capital which are eccentric precisely in the doubling of the central scotia. The two that most closely resemble the Castor bases are those of the two Ionic temples in the Forum Holitorium, *i.e.* the central and northern ones of three incorporated in the medieval church of S. Nicola in Carcere. The surviving column-bases of these two temples are relatively tall, and the scotiae, though rather shallow, are broad and well developed (fig. 1,1). Here, if anywhere, assuming a Republican date, it would seem reasonable to postulate the more or less direct influence of Ionic models in Greece itself. Unfortunately, there has been no detailed study of these buildings since they were partially cleared thirty years ago, and there is still considerable room for disagreement about the related problems of their identification and the dates of their surviving structures.[19]

[14] *Antiquities of Ionia*, iv, 1881, pp. 40–43, pl. 29.
[15] Ch. Texier, *Descr. de l'Asie Mineure*, i, 1839, pl. 31.
[16] H. C. Butler in *Sardis*, II, i, pp. 113 ff., ill. 110.
[17] *MAAR*, xxvi, 1960, fig. 86; *cf.* those of the basilica at Cosa, mid-second century B.C.
[18] A. Bartoli, *Boll. d'Arte*, xxxiv, 1949, p. 301, figs. 16, 17.
[19] The basic publication remains that of R. Delbrueck, *Die drei Tempel am Forum Holitorium in Rom*, 1903; see also V. Fasolo, *I Tre Templi a S. Nicola in Carcere*, Rome, 1925. For recent discussions of the problems of date and attribution, see M. E. Blake,

Certain facts do seem to be established. One is that the whole area was swept by a severe fire in 31 B.C.,[20] which must have severely damaged, though it did not necessarily destroy all three temples; the surviving remains of the southernmost, the Doric temple, may well date from after this disaster. As Miss Blake sagely remarks: 'if we could know what the site looked like on the morning after the fire, we should have the key to the whole subsequent history of the temples.' The literary record is manifestly incomplete, but it is almost certain that one of the three is the Temple of Spes, which is known to have been restored by Augustus and rededicated by Germanicus in A.D. 17. To judge from the passage of Tacitus recording this fact,[21] there was a long time-lag in the restoration of many of the lesser buildings of this area, a delay that could well be explained by the pressure of other, more important building work in the vicinity. When we turn to the surviving remains we find that in one of them only, the central temple, is there specific evidence of an early Imperial restoration, the surviving entablature being manifestly of late Augustan or Tiberian date. This is the building that is usually identified with the temple of Juno Sospita, which was built in 197–194 B.C. and restored by C. Julius in 90 B.C. (the record is silent about its restoration after the fire), and the remains are held to be those of the 90 B.C. building, repaired and renovated by Augustus or Tiberius. The basic structure of its companion, the north Temple, might seem from its materials to be slightly earlier, but in other respects it so closely resembles its neighbour that it must have had a very similar history.

From the above summary it is evident that the choice lies between two possible alternatives. Either the surviving remains of the two Ionic temples in the Forum Holitorium are those of the buildings that were standing here before the fire of 31 B.C., patched and restored after the fire, but along existing lines and with the re-use as far as possible of the original materials; or else they are those of a more radical restoration, following conservative lines and using traditional materials, but in fact a rebuilding rather than a restoration. In terms of the currently accepted chronology the first alternative is the more probable, and they would be good evidence of the currency in Rome of bases of this form before the building of the Temple of Castor. It must, however, be admitted that the more closely one scrutinises the conventional chronology, the shakier its foundations are seen to be. Although the historical identifications on the basis of which these and similar buildings have been ascribed to various dates in the second and first centuries B.C. are in many cases known to be mistaken, or at best inconclusive, the conclusions drawn therefrom about the uses of their constituent materials are apt to be accepted without question and the materials themselves to be used as a sound criterion of early date. There is, in fact, nothing in the present evidence to exclude the possibility that throughout the reign of Augustus, side by side with the great Imperial foundations with their many innovations in techniques and materials, lesser monuments such as these small temples were still being built or restored in the traditional way and with traditional materials. It does not lie within the scope of this paper

Ancient Roman Construction, 1948, pp. 165–166; G. Lugli, *La Tecnica Edilizia Romana*, 1957, pp. 320–332.

[20] Dio, l, 10, 3.

[21] *Ann.* ii, 49.

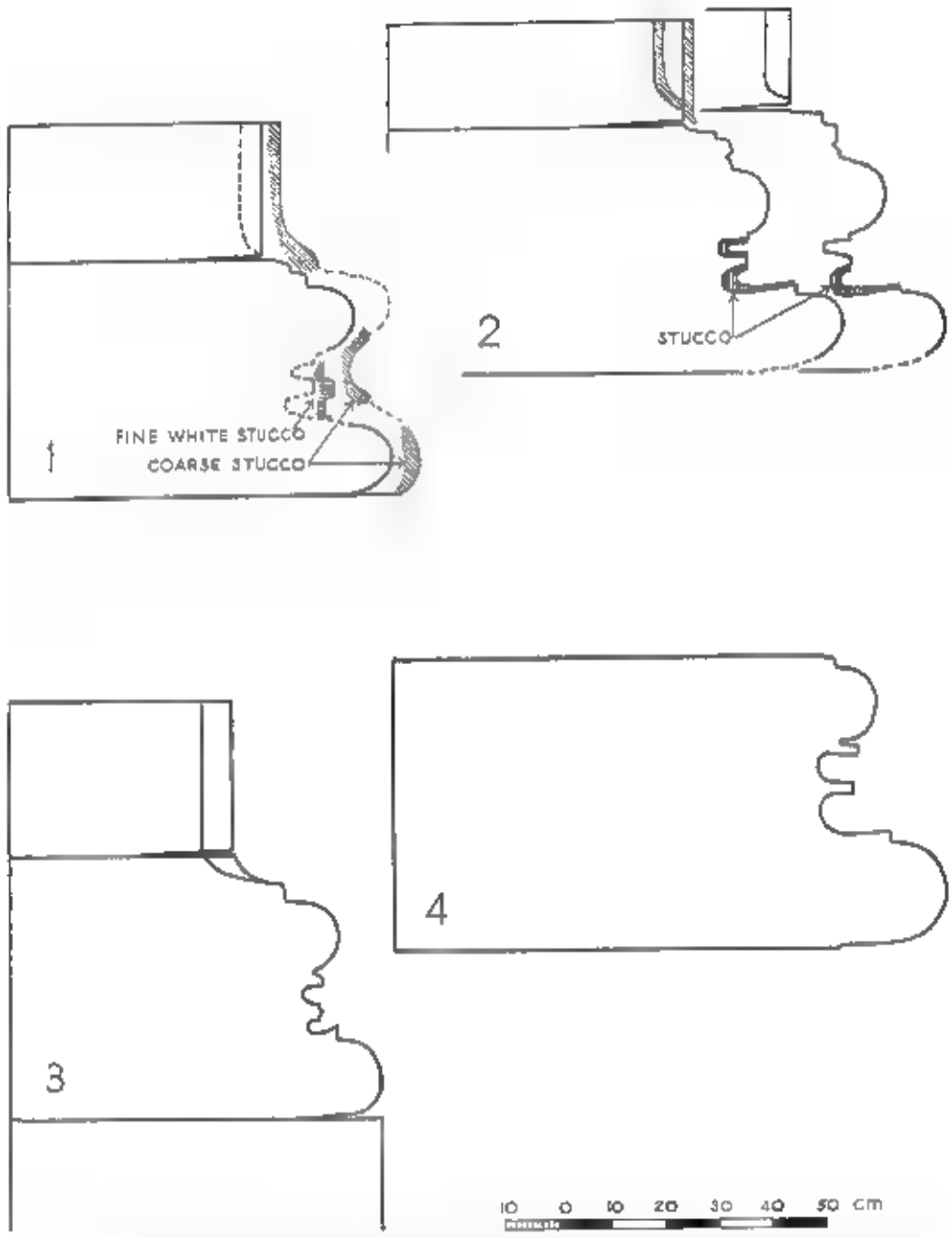

FIG. 2. COLUMN-BASES. 1, LARGO ARGENTINA, TEMPLE A. 2. LARGO ARGENTINA, TEMPLE B. 3, TEMPLE IN VIA DELLE BOTTEGHE OSCURE. 4, TEMPLE OF SATURN.

to pursue further the question of the date of the surviving superstructures of the two Ionic temples of S. Nicola in Carcere. But since there is, at the very least, a possibility that both may be contemporary with, or a few years later than, the Temple of Castor,[23] it is wiser to leave the column-bases out of account in the present context.

Fortunately, there is another related Republican form of column-base which is more securely dated. This is that used in two of the temples of the Largo Argentina sacred precinct, both dating in their present form from the turn of the second and first centuries B.C.[25] In Temple A (fig. 2,1) the surviving bases of this phase are of tufa, and they later received a heavy coating of mortar and stucco to convert them into orthodox, single-scotia Attic bases; but enough remains of the original stucco facing and of the stone beneath to show that, as first carved, they were very similar to the better-preserved bases of the adjoining, and perhaps slightly earlier, Temple B (fig. 2,2; pl. IX, *a*). These are of travertine with traces of an original stucco facing and, apart from a small extra moulding above the upper torus, the general proportions are those of an ordinary Attic base except that, instead of the single curved scotia there are two deep, narrow, horizontal slots separated by a slim, projecting tongue of stone. Another set of bases of the same general form can be seen in the temple in the Via delle Botteghe Oscure.[24] These bases (fig. 2,3) are of travertine, and the somewhat taller proportions and more elaborate character of the moulding between the two scotias suggests that the date is late rather than early in the second half of the first century B.C.

With the advent of marble there was, therefore, a variety of Republican models available, and out of the very limited number of authenticated early Augustan bases that have come down to us (serviceable marble bases are notoriously vulnerable to the activities of later builders), at least two groups are of the double-scotia form. One is that of the Temple of Apollo *in Circo* (*v.* list above), the proportions and decoration of which are, like all the ornament of this temple, remarkably sophisticated. Except for the chronologically significant omission of the rectangular plinth,[26] they closely resemble those of the elaborately carved interior orders of Mars Ultor and of Concord. The other group is that still in position in the Temple of Saturn. Of the eight surviving bases, the three at the north-west angle are late replacements and that at the north-east angle is of developed double-scotia form with a square plinth beneath. The remaining four (fig. 2,4; pl. IX, *b*) all belong to the reconstruction by Munatius Plancus. Again the absence of any plinth is a clear indication of early date, and if one compares the profile with that of the bases of the two Largo Argentina temples, it is probably not altogether fanciful to claim the Saturn

[23] Such a relationship would help to explain another unusual feature of the two Ionic temples, namely, the recesses in the flanks of the podia between each column, a feature which they share with the Temple of Castor.

[24] G. Marchetti Longhi, *Bull. Com.*, lxiv, 1936, pp. 83–89 (Temple A).

[25] A. M. Colini, *Bull. Com.*, lxvi, 1938, pp. 260–1. The identification as the Temple of Bellona, already questioned by M. Guarducci, *Bull. Com.*, lxxiii, 1949–50, pp. 55–76, becomes completely untenable now that the Circus Flaminius is known to lie well to the south of the traditionally accepted site (G. Gatti, *Capitolium*, July, 1960, pp. 3–12).

[26] The present restoration follows Coner's drawing in incorporating plinths, but Professor Colini informs us that he is doubtful whether there were any such, and that if there were, they were certainly carved separately from the bases.

bases, with their hard, deeply-cut outlines and heavy shadows, ▬ a translation into marble of this particular pre-marble Republican tradition.

Except for the bare fact of the retention of the double scotia, the later history of the form is one of the rapid and almost complete abandonment of the less orthodox features of Republican usage. Bases without plinths were obsolescent, if not already obsolete, by the later Augustan period, perhaps as a result of those direct influences from Attica of which there are so many indications in the Forum Augustums. (It is significant that the bases of the Lesser Propylaea at Eleusis, built between 50 and 48 B.C. by local craftsmen to the orders of the philhellene friend of Cicero, Appius Claudius Pulcher,[36] are already of this form.) The reeding of the central projecting member in many of the later Augustan and post-Augustan examples, including the Temple of Castor itself (for a typical later example, ▬ the Temple of Vespasian, fig 1,4), comes straight from the orthodox Ionic base and is another clear indication of fresh influence direct from the Greek world. If our analysis is correct, the bases of the Temple of Castor afford an admirable illustration of the rapidity with which the architecture of Augustan Rome was able to absorb each fresh influence, producing a vital synthesis which, for all its derivative features, could only have taken place on Italian soil.

3. *The Capitals*

Most scholars who have studied the capitals of the Temple of Castor have accepted the Augustan dating.[37] It is not proposed to repeat all their arguments here, but simply to draw attention to some of the details that provide a clear indication of date and to cite some of the more important parallels.

(a) *The carving of the capitals in two separate blocks*

The capitals ▬ carved from two separate blocks of Luna marble. This division into two blocks was essentially a matter of practical convenience. It was probably adopted in the first instance for reasons of economy in quarrying (the lower half of a two-block capital can be cut from a piece considerably smaller than the upper) and in transport and handling. It must have been considerations such as these which dictated its use by, for example, the builders of the Olympieion at Athens. In Rome there was the additional reason that cubical blocks of travertine or tufa of the required dimensions and quality are difficult to come by and, in the case of tufa, to handle, and in the larger buildings of the last century of the Republic the two-block capital was therefore almost standard practice. With the gradual displacement of travertine from monumental architecture and the steadily increasing supply of marble, often in very large blocks, these reasons ceased to be operative; and since the carving on two separate blocks inevitably restricted the freedom of the sculptor to manipulate the internal proportions of the capital, the practice was soon abandoned. By the middle of the first century A.D. marble capitals of whatever size were regularly carved in one block.

[36] H. Hörmann, *Die innern Propyläen ▬ Eleusis*, Berlin, 1932, figs. 20, 22.

[37] See, for example, E. Weigand, 'Baalbek und Rom' in *JdAI*, xxix, 1914, Tap. 86, and M. Gütschow, 'Untersuchungen zum korinthischen Kapitelle, I' in *JdAI*, xxxvi, 1921, pp. 44–83, and H. Kähler, *Die römischen Kapitelle des Rheingebietes*, pp. 13 ff.

The following is a representative list of two-piece capitals in Rome:

The Round Temple in the Largo Argentina. Travertine.
The Round Temple by the Tiber. Pentelic marble.
The Forum of Caesar; fragment of a marble capital, perhaps from the original Forum.[36]
The Temple of Magna Mater on the Palatine. Tufa.[37]
The Temple of Apollo Palatinus. Luna marble.
The Temple of Apollo *in Circo*. Luna marble (pl. X).
The Parthian Arch of Augustus. Luna marble.
The Temple of Mars Ultor. Luna marble.

The list is not exhaustive and deliberately omits examples that cannot be attributed to particular buildings. The dates range from the early first century B.C. to the time of Augustus. After Augustus there is ▬ evidence for the continuance of this practice in marble architecture, but it may well have lingered ▬ for some time in other materials; see, for example, two travertine capitals of seemingly late Julio-Claudian date lying near the Temple of Vespasian.[38]

(b) The Proportions

The proportions of the capitals not only reflect their carving in two blocks, but are also, without question, those customary in capitals dating from early Imperial times. The leaf ranges take up about half the total height,[39] and the abacus is tall in proportion to the rest of the capital. In late Republican, Augustan and Julio-Claudian capitals, generally, the leaf ranges seldom occupy much more, and sometimes less, than half the total height; in the later first and second centuries A.D. the leaf ranges gain at the expense of the volute zone and are almost always well over half the total height.[39] The volutes, consequently, become flatter, the cauliculi lower and the central stem shorter. The abacus is always much lower in proportion.

In Augustan capitals, the relative height of the upper zone also gives greater prominence to the central stem, which becomes an important feature in the design of the capital and is sometimes given elaborate decorative treatment; a good example of this is the capital of Apollo *in Circo* (pl. X).

(c) The design and decorative details

The design is orthodox Corinthian with a few unusual details, notably the interlocking helices, the little calyx between the helices and volutes from which there issues a leafy scroll spreading over the cavetto of the abacus, and the decorated abacus.

Volutes and helices. The basic form of the volutes and helices of the Roman Corinthian capital changes little throughout its history. The interlocking helices (pl. VII, *a*) are a very unusual feature; the only other example known occurs ▬

[36] H. Kähler, *op. cit.*, Beilage, 2, 9.
[37] *Röm. Mitt.*, 10, 1895, p. 16.
[38] R. Delbrueck, *Hellenistische Bauten in Latium* 1, *Strassburg*, 1907, p. 43, abb. 41.
[39] It must be noted that several published drawings and engravings (*e.g.* the one reproduced in *Röm. Mitt.*, 60–61, 1953–54, Taf. 86, are inaccurate in proportions.
[39] See the tables of dimensions in Gütschow, *art. cit.*, pp. 76–77.

a capital from the Temple of Jupiter at Baalbek, which Weigand rightly dated to the early Imperial period.[33] There is also an unpublished capital in the Museum at Cherchel, which combines normal volutes with interlocking leafy stems such as are found on a series of Corinthianising capitals on which foliage takes the place of the normal volutes.[34] In the absence of any precise parallel it may be said that a variant of this kind is more likely in the Augustan period, when experimentation with traditional forms was common, than it would have been at any later date. A second unusual detail is the presence of a leafy frame issuing from the calyx of the cauliculus and lapping over the inside edge of the volutes; this can be matched on several Augustan and Julio-Claudian capitals (*e.g.* the temples of Divus Julius, Apollo *in Circo* (pls. *Xa* and *b*), the Temple of Rome and Augustus at Pola),[35] but very rarely later examples.[36]

The calyx in the space between the volutes and helices is a variant of a feature that is very common on early Augustan capitals, especially between 40 and 20 B.C. On these capitals, described by Kähler as the Second Triumvirate Group,[37] a thin stem surmounted by a rosette rises from the base of the helices and volutes; the rosette either touches the underside of the abacus or partly overlaps it. A few examples only need be cited here:

The Temple of Apollo Palatinus.
The early capital from the Forum of Caesar.
The Temple of Divus Julius (fragment) (pl. XIII, *b*).
The Arch of Augustus at Rimini (pl. XIV, *a*).

No later examples of this detail seem to be known. It is also found on a well-known series of Corinthianising pilaster capitals, ranging in date from the late Republican to the early Imperial period, whence it was adopted as an element of the composite capital.[38] In the case of the Temple of Castor there issues from the little calyx a coiling acanthus stem which develops into a floral scroll on the cavetto of the abacus; the ovolo crowning the cavetto is decorated with egg-and-tongue ornament.

A decorated abacus is generally an early feature in Corinthian capitals of Imperial Rome and Italy; in Rome it is hardly ever later than Julio-Claudian times. A scheme of decoration almost identical with the Castor capitals is found on the Arch of Augustus at Rimini (pl. XIV, *a*) and on the Temple of Apollo *in Circo* (pl. X). One may compare also the detail of the Augustan Corinthianising pilaster capital now in the Museum of Castel Sant'Angelo.[39] Another popular decorative scheme in the period consists of fluting on the abacus and a decorated ovolo. The heavily restored late Augustan capital in the Chiostro Grande of the Museo Nazionale delle Terme[40] (pl. XII, *a*) is probably the best known example in Rome. The Arch of the Sergii at Pola[41] may be cited as an example from outside Rome,

[33] E. Weigand, *art. cit.*, p. 43 ff., Beilage, 1, 4 and *Baalbek*, i, Taf. 65, left.
[34] K. Ronczewski, 'Römische Kapitelle mit pflanzlichen Voluten' in *AA*, 1931, cols. 1 ff., especially abb. 79.
[35] V. Scrinari, *I Capitelli Romani della Venezia Giulia e dell'Istria*, Rome, 1956, 4–7.
[36] See below, p. 18.
[37] Kähler, *op. cit.*, p. 7 ff.
[38] *JRS*, 50, 1960, pp. 121 ff.
[39] P. Gusman, *L'Art Décoratif de Rome*, iii, 1914, pl. 177.
[40] *Ibid.*, pl. 185.
[41] Scrinari, *op. cit.*, no. 3.

and, yet further afield, a capital in the Museum at Nîmes which Kähler puts in the last years of the first century B.C.[42] Richer decorative schemes appear on some capitals from the interiors of Augustan buildings, *e.g.* the Temple of Concord.[43]

The cauliculi are vertically fluted and surmounted by a broad convex rim which is fluted horizontally. The top of each flute is decorated with a little semicircular leaf; each of the spaces between these leaves is filled with an acorn (pl. IV, *a*).

The general form of these cauliculi—the shallow fluting, the broad convex rim—is normal in the Augustan period. As will be seen from the following examples, the rim may be horizontally fluted, as here, or plain, and the flutes are either vertical or twisted:

The Round Temple by the Tiber: vertical fluting, plain convex rim.
The Round Temple in the Largo Argentina: vertical fluting, convex rim.
The Arch of Augustus at Rimini: vertical fluting, plain convex rim (pl. XIV, *a*; fig. 3,11).
The Temple of Apollo *in Circo*: twisted fluting, plain convex rim (pl. X; fig. 3,12).
The Temple of Mars Ultor: vertical fluting, horizontal fluting on the rim (pl. XI; fig. 3,14).
The Temple of Concord: as Apollo *in Circo*.
The Temple of Augustus at Pola: twisted fluting, cable rim.[44]
The smaller order of the Basilica Aemilia: twisted fluting, horizontal fluting on rim (pl. XII, *b*).
The Temple of Rome and Augustus, Ostia (pl. XIV, *b*).

An unusual detail of the Castor cauliculi is the little leaf-and-acorn motif at the top of the flutes. This is best explained as a decorative variant suggested to the designer by the curling over of the tops of the flutes on a number of contemporary capitals, *e.g.* Mars Ultor (pl. XI).

The detail of the Castor cauliculi could not be anything but early Imperial. Cauliculi combining shallow fluting with a broad convex rim are never found on Flavian and later capitals, and horizontal fluting on the rim is confined to a few Augustan and early Julio-Claudian capitals. On capitals of the late first and early second century A.D., the flutes are invariably more deeply carved and the convex rim disappears in favour of leaf ornament of various kinds (see fig. 3,15 and 16).

The acanthus leaves of both ranges are divided into five main lobes. The midribs are ridged and flanked by deep grooves running to the upper lobes. A deep pear-shaped recess is formed at the junction of two lobes by the overlap of adjacent points, and a broad ridge, the surface of which is fluted, runs from each recess to the base of the leaf; the lower edge of the recesses is curled down. The individual points of the lobes are naturalistically carved with a central vein in relief (fig. 3).

Several details of the leaf carving are remarkably like the capitals of Mars Ultor (pl. XI) and those of the Forum of Augustus in general (*e.g.* pl. XIII, *a*). Two in particular may be noted here: the way in which the lower edge of the opening at the junction between the lobes is curled back and the fluted surface

[42] Kähler, *op. cit.*, Beilage 5, no. 2.
[43] *MAAR*, v, 1925, pl. 48, fig. 1.
[44] Scrinari, *op. cit.*, nos. 4–7.

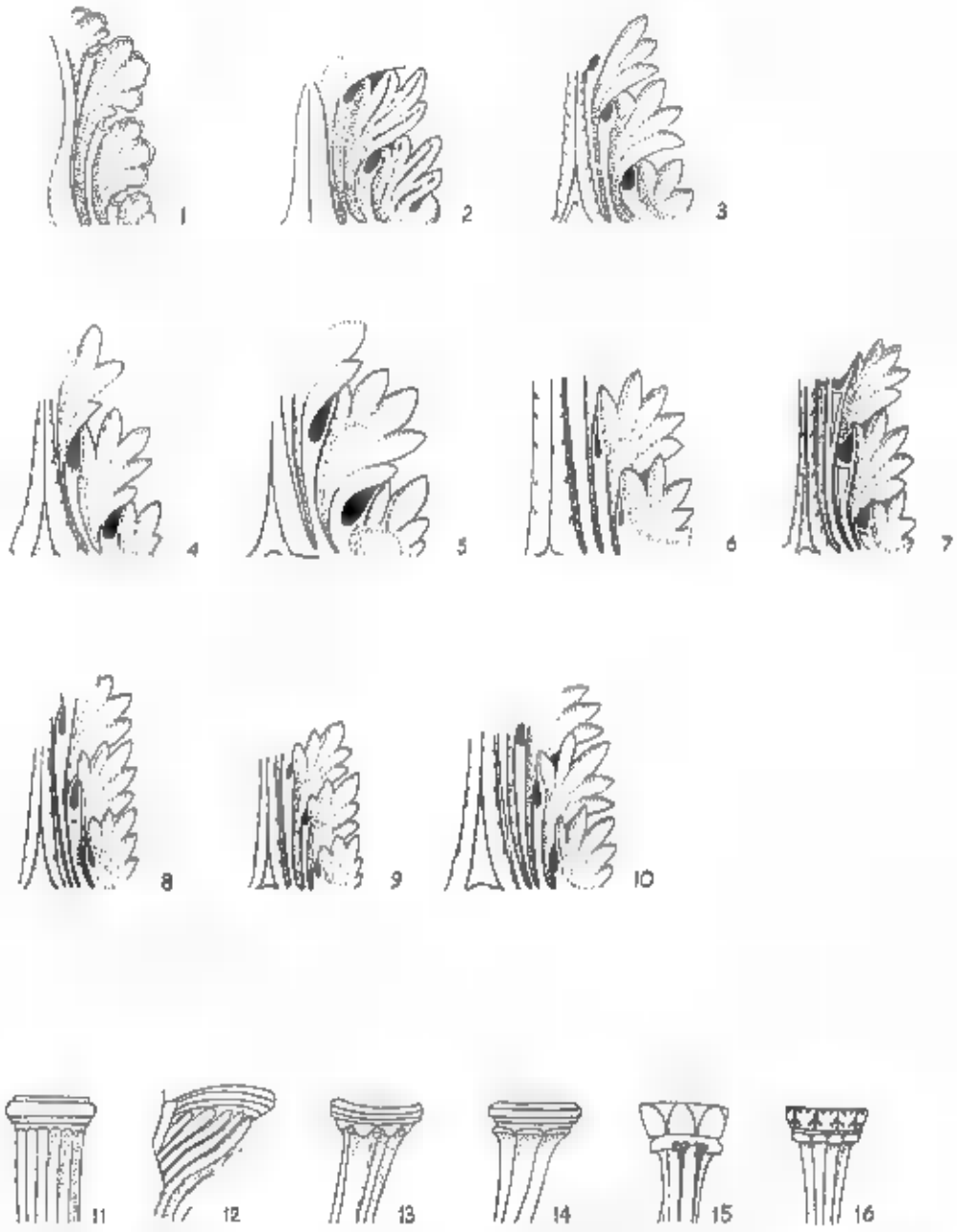

Fig. 3. Details of Capitals. 1, Temple of Apollo in Circo. 2, Temple of Castor. 3, Forum of Augustus. 4, Basilica Aemilia, Smaller Order. 5, Ostia, Temple of Rome and Augustus. 6, Flavian Palace. 7, Forum of Trajan. 8, Pantheon. 9, Hadrianeum. 10, Temple of Antoninus and Faustina. 11, Rimini, Arch of Augustus. 12, Temple of Apollo in Circo. 13, Temple of Castor. 14, Temple of Mars Ultor. 15, Flavian Palace. 16, Pantheon.

of the ridge running up to it (*cf.* pls. V and XIII, *a*). The Castor capitals also share with almost all Augustan and Julio-Claudian capitals a general similarity in the shape of the cavity formed by the overlapping points of two adjacent lobes. This cavity, as may be seen from the examples shown on fig 3, is pear-shaped and slopes outwards in the earlier period, whereas in later examples it is wedge-shaped and vertical or almost vertical. Whatever the precise arrangement of the lobes and the details of the leaf carving, this factor remains a useful general indication of the date of the capital (fig. 3, 1–10).

As examples of the former, one may cite:

The Forum of Augustus, generally (pl. XIII and fig. 3,3),
The smaller order of the Basilica Aemilia (pl. XII, *b*, and fig. 3,4),
The Temple of Rome and Augustus at Ostia (pl. XIV, *b*, and fig. 3,5),

and of the latter:

The Flavian Palace on the Palatine (fig. 3,6),
The Forum of Trajan (fig. 3,7),
The Pantheon (fig. 3,8),
The Hadrianeum (fig. 3,9),
The Temple of Antoninus and Faustina (fig. 3,10).

The ovolo ■ *the abacus* consists of a series of pointed oval eggs framed in a casing that recedes into the background below the apex of the egg. This casing slopes back sharply towards the surface of the ■ and is slightly concave. The tongue is ridged and narrows to a point; it is deeply cut only in its lower part.

This type of egg-and-tongue is a clear indication of Augustan or Julio-Claudian date. Examples, of basically similar ■ closely related form, are ■ be seen on the following buildings:

The Parthian Arch of Augustus.
The Basilica Aemilia, cornice of the lower order (pl. XIX, *b*).
The Temple of Mars Ultor, coffering (pl. XVIII).
The Temple of Concord, architrave.
The Capitolium at Terracina.[48]
The Arch of Tiberius, a fragment of the cornice (pl. XVI, *b*).
The Temple of Rome and Augustus at Ostia.

The ovolos on the entablature of the temple are discussed in detail below; it is hardly necessary to point out that ovolos of this form never occur in Flavian and later buildings. A very close parallel is the ovolo on the capital in the Museo delle Terme (pl. XII, *a*).

From the above analysis of the design and decoration of the capitals of the Temple of Castor it will be seen that they cannot be later than late Augustan. The closest parallels for several unusual details of the leaf-carving are to be found on the capitals of Mars Ultor and the colonnades of the Forum of Augustus. The details of the capitals alone ■ thus sufficient to confirm the traditional dating of the surviving building to the restoration by Tiberius.

[48] G. Lugli, *Forma Italiae, I* (*Anxur-Terracina*), pp. 83–85.

More generally, it may be remarked that no single detail of a Roman capital will give a certain indication of date. A designer will frequently copy individual earlier details, but he does not copy them all. Thus the capitals of the Porticus Deorum Consentium share with Castor the decorated abacus and the leafy frames of the volutes, but the leaves and cauliculi are later in style. The capitals of the so-called 'Temple of Bacchus' on the Via Latina have cauliculi and volutes not unlike Castor, but the leaf-carving could not be earlier than about A.D. 100.

4. *The Entablature*

(*a*) *The general design*

The general design of the Castor entablature is orthodox Roman Corinthian. A cornice with strongly projecting corona supported by regularly spaced modillions is associated with the earliest marble buildings of the city of Rome (*e.g.* the Regia, the Temple of Divus Julius, the Temple of Apollo Palatinus). In most early Roman entablatures, as here, the row of Ionic dentils remains the dominating feature of the bed mould of the cornice (*cf.* the temples of Mars Ultor and of Concord); in later, especially in Flavian, entablatures these are scaled down and sometimes omitted altogether.[45]

The Ionic frieze is a normal feature of Roman Corinthian and the three-fascia architrave is standard from late Augustan times onwards.[47]

(*b*) *The character and distribution of the decorated elements*

All the mouldings of the entablature with the exception of the sima are decorated; in addition, carved ornament appears on the face of the corona and on the second fascia of the architrave. The basic forms of the decorative motifs are those that became established in Roman architecture during the Augustan period—egg-and-tongue, bead-and-reel, cyma reversa ornaments types B and C.[48] The corona is ornamented with a design of vertical fluting, a decorative motif popular from a very early period in Roman architectural ornament, and the second fascia of the architrave with an anthemion design consisting of upright lotus forms rendered in acanthus foliage alternating with inverted palmettes and joined to them by S-scrolls. On the soffit of the architrave are broad panels decorated with a symmetrical design of heavy acanthus foliage and framed by an ovolo and astragal.[49]

Decorated profiles first appear in large-scale marble architecture in Rome during the period between 30 and 20 B.C., the earliest marble entablatures having been without carved ornament.[50]

The decorated corona appears on the Doric Order of the Parthian Arch of Augustus; also on the Temple of Concord, which employs the same motif of vertical fluting (pl. XIX, *a*). In Julio-Claudian times meander ornament and vertical fluting

[45] *E.g.* the Temple of Antoninus and Faustina (Gusman, *op. cit.*, pl. 173).

[47] Among earlier Augustan entablatures the Regia (36 B.C.) has an architrave with two fasciae and the Temple of Apollo *in Circo* one with four.

[48] For the classification see Strong, *PBSR*, xxi, 1953, p. 121.

[49] The soffit panel is illustrated in Wegner, *op. cit.*, pl. 8, *b*.

[50] Except for rosettes between the modillions (see F. Toebelmann, *Römische Gebälke*, I, pp. 4 ff.).

are the most common forms of decoration. Thereafter the corona is usually decorated, except in periods when a more severe style of decoration prevailed.

The decorated architrave fascia is found on the entablature of Apollo *in Circo* (vertical fluting) and subsequently in a number of Julio-Claudian architraves (*e.g.* the door frame of the central temple of S. Nicola in Carcere). On a fragment, now lost, probably from the Triumphal Arch of Claudius[51] two of the architrave fasciae were decorated, and on some architraves of the Flavian period all three fasciae were sometimes richly decorated. In the post-Flavian period, the decorated fascia is less common, but is found on a number of Antonine buildings[52] and, in the later second and third centuries, on entablatures carved in imitation of earlier, especially Flavian, architectural decoration.[53]

The earliest *ornamented soffit panels* come from buildings erected around 20 B.C. On the Temple of Apollo *in Circo* double panels with a design of bukrania and palmettes make up a broad decorated soffit. On the Parthian Arch of Augustus the architrave of the remarkably ornate Doric order had soffit panels decorated with scroll ornament and framed by a decorated cyma reversa and astragal. Scroll ornament is also found on the architrave from the interior of Apollo *in Circo*.[54] In the early Julio-Claudian period the soffit panel with semi-circular ends to accommodate the rosette of the capital is found on the smaller order of the Basilica Aemilia. The subsequent development of the decorated soffit may be studied in a number of dated buildings in the city of Rome.[55] Wegner's and von Gerkan's hypothesis that a broad soffit of this kind cannot be pre-Flavian must be rejected. The ornament of the Temple of Apollo *in Circo*, which Wegner mainly for this reason dates to the Trajanic period, is so remarkably similar to the group of fragments found in the Roman Forum near the Regia that they must be considered contemporary and probably come from the same workshop. The Forum fragments belong to an Arch of Augustus that was erected almost certainly to commemorate the return of the Parthian standards in 20 B.C.[56] Wegner's dating of the Maison Carrée on the same hypothesis to the Flavian period is no less perverse, since it has to contend against not one inscription but two successive inscriptions, both of which seem to refer to the time of Augustus.[57]

There remain two features of the profiling of the Castor entablature that are unusual, namely the use of an ovolo profile to divide the sima from the corona and of a cyma reversa to divide the upper and middle fasciae of the architrave.

The *ovolo between the sima and the corona* never occurs on large entablatures of the earliest marble buildings but is common on small-scale cornices, especially in the period between 30 and 15 B.C. On the Arch of Augustus at Rimini an ovolo between astragals is carved below the sima while the corona is reduced to a narrow fillet. On the Parthian Arch of Augustus and the Temple of Apollo *in Circo*

[51] S. Reinach, *L'Album de Pierre Jacques*, Paris, 1902, p. 121, pl. 29.

[52] *E.g.* the Hadrianeum (Strong, *art. cit.*, pp. 123 ff.).

[53] For the 'Flavian Renaissance' under the Severans see von Blanckenhagen, *op. cit.*, pp. ff.

[54] D. E. Strong, *Roman Imperial Sculpture*, London, 1961, fig. 32.

[55] For these, and other, examples, Wegner, *op. cit.*

[56] See, most recently, E. Nash, *Pictorial Dictionary of Ancient Rome*, 1, 1961, p. 92 ff., fig. 102.

[57] J. C. Balty, *Études sur la Maison Carrée de Nimes*, Latomus, 1960.

(pl. XV, *a*) the ovolo below the sima in effect takes the place of the corona. These three entablatures are all somewhat unorthodox in profiling; more normal is a small entablature of about the same date (*c.* 25–20 B.C.), now lying by the so-called 'Temple of Bellona' in Via delle Botteghe Oscure, on which an ovolo divides the sima from the corona.[59] After this early period, the ovolo in this position is rather rare, but was revived in late Hadrianic times for a number of entablatures of buildings erected in Rome under the influence of the architecture of Asia Minor.[52]

The use of a *cyma reversa profile to divide the fasciae of the architrave* is much less common than the orthodox astragal but is occasionally found in all periods. An early Julio-Claudian example is the architrave of the door in the central temple of S. Nicola in Carcere and in Flavian times the profile in this position was not uncommon;[60] it disappears later. An alternative profile in this position is the ovolo, which is used on several architraves of the Augustan and Julio-Claudian periods (*e.g.* the Temple of Concord).

It may be concluded that there is no feature of the design and general scheme of decoration on the Castor entablature that precludes an Augustan date. On the other hand, few, if any, features of the design or decoration are exclusively early. For conclusive evidence of the date we have to rely upon the results of a detailed examination of the forms and carving of the decorated profiles and other ornamental motifs.

(*c*) *The individual motifs*

Vertical fluting has a long history in Etruscan and Roman architectural decoration. On the earliest examples, which include late Etruscan terracotta revetments,[61] there is no tongue or ridge between the flutes. In this form the motif appears on the architrave of the Temple of Apollo *in Circo* and on a very early Augustan fragment, now lying at the east end of the Basilica Aemilia. The narrow 'tongue' between the flutes and the semi-circular filling at the base of the flutes appear in the later Augustan period. The Castor fluting (pl. VI, *c*) is paralleled in the Caryatid Order of the Forum of Augustus (pl. XVII, *a* and *b*) and on the cornice of the Temple of Concord (pl. XIX, *a*). In some Julio-Claudian examples the base of the flutes is often enriched by a little toothed leaf surmounting the semicircle.[62]

It may be worth while to list here some later examples of this motif, none of which has much in common with the Augustan form ▬ represented by the Forum of Augustus, Concord and Castor.

The Temple of Divus Vespasianus: the tongue is omitted and the filling at the base is carved to look like three superimposed discs.[63]

The Temple of Venus Genetrix: very similar to Divus Vespasianus.[64]

The Forum of Trajan: the Augustan form revived, but without the tongue.

[59] *Cf.* the cornice found in Piazza della Minerva, perhaps from the Saepta Julia (A. Bartoli, *I Monumenti Antichi di Roma nei disegni degli Uffizi di Firenze*, vol. iv, pl. 326, fig. 541.

[60] Strong, *art. cit.*, pp. 121 ff.

[61] von Blanckenhagen, *op. cit.*, *e.g.* Tafs. 12, 37, and 28, 78.

[62] A. Andrén, *Architectural Terracottas from Etrusco-Italic Temples*, Lund, 1939, *e.g.* pl. 21, 68 and pl. 82, 286.

[63] *E.g.* on the door-frame of the central temple under S. Nicola in Carcere (L. Canina, *Gli Edifizi di Roma Antica*, ii, pl. XXXIX).

[64] Gusman, *op. cit.*, pl. 65.

[65] C. Ricci, A. M. Colini and V. Mariani, *Via dell'Impero*, pp. 42 ff.

Fragments, now in the Lateran Baptistery, from the colonnades of the Hadrianeum[65]; the flutes narrow downwards and are joined together at the bases; the tongue is reintroduced.

The Temple of Antoninus and Faustina: no tongue, and the filling is engraved round the edge.[66]

The subsequent history of the motif is of no interest in the present context.

The *anthemion on the architrave* is damaged (pl. VIII, *a*). The motif consists of alternate calyxes of acanthus foliage and inverted palmettes linked together by a concave fillet that forms a scroll at the bases of the calyxes and the palmettes. There is a rosette in each scroll and the leaves issuing from the calyxes extend across the fillets and coil in the spaces flanking the palmettes. The combination of plain fillets, palmettes and acanthus foliage in the rendering of the anthemion seems to be an early feature which, in post-Augustan architecture, gives way to a motif completely rendered in acanthus foliage. For the combination of acanthus calyxes and plain scrolls, one may compare some fragments of friezes from the Forum of Augustus.[67] For the rosettes in the scrolls of the fillets, *cf.* the architrave of the smaller order from the Basilica Aemilia.

The *acanthus ornament of the soffit of the architrave*. Wegner's detailed analysis of the design leads him to the conclusion that the soffit is not far different in date from that of Divus Vespasianus (Wegner, p. 100), yet he draws attention to points of contrast that seem to indicate a different conclusion. One passage may be quoted in full: 'Es ist allerdings kein unwesentlicher Unterschied dass die pflanzlichen Motive dieser Komposition am Vespasian-Tempel zur Mitte streben, am Castor-Tempel dagegen von der Mitte aus sich entfalten. Das Muster wirkt beim Vespasian-Tempel verteilt oder summiert, beim Castor-Tempel gesammelt und als ein zusammenhängendes Ganzes organisch entwickelt. Dort ist das Pflanzliche einem ornamentalen Schema eingeordnet worden; hier entwickelt sich das Pflanzliche [redacted] einem ornamentalen Gefüge - und das hat als ein reiferes künstlerisches Entwicklungsstadium zu gelten.' It seems to us that these acute observations on the differences between the two soffits lead, in view of what is known about the development of Roman ornament, to a completely opposite conclusion. The style of the acanthus ornament and the naturalistic modelling of the leaves suggest an earlier date for Castor and a comparison with Julio-Claudian scroll-work, such as the altar-scroll in the Capitoline Museum is instructive.[68]

The *decorated ovolo* appears five times on the order of the Temple of Castor: to divide the sima from the corona; to frame the inner recess of the coffers below the corona; to crown the frieze; to frame the soffit panels of the architrave; on the abaci of the capitals. The details of the ovolo [redacted] the capitals has already been discussed (p. 17); it differs in some respects from the other four examples.

The prevailing form consists of a series of pointed oval eggs, deeply cut and framed in a casing that is continued round the apex. The casing narrows towards the apex, slopes back towards the surface of the egg and is slightly concave. Between the casings is a narrow, deeply carved 'tongue' with a central ridge formed

[65] Strong, *art. cit.*, p. 124, with previous bibl.
[66] Gusman, *op. cit.*, pl. 173.
[67] *Mitt. deutsch. archaeol. Instit.*, VI, 1953, Taf. 7.
[68] D. Mustilli, *Il Museo Mussolini*, pl. LXI 241, 1–3.

by two steeply sloping and slightly concave surfaces. The tongue narrows down to a point.

It is impossible to give here a full account of the development of the ovolo in Roman architecture. In the present context the buildings erected around 20 B.C. offer a convenient starting point. On the Temple of Apollo *in Circo* and on the Parthian Arch of Augustus the eggs are broad and pointed at the apex (*e.g.* pl. XV, *a*); the edge of the casing slopes back steeply towards the surface of the egg and recedes into the background below the apex. The eggs are deeply carved and the ridged tongue is narrow at the top, widens in the centre and then narrows to a point. A similar form is found on the larger order of the Basilica Aemilia, with the tongue rather shallow above and deeply cut at the point.

On the Temple of Mars Ultor the tongue is still carved shallow in its upper part, but the egg is more deeply cut and the sloping casing is concave (pl. XVIII). The form that appears on the entablature of the long colonnades of the Forum is very closely related to that of Castor. The tongue is deeply cut and sharply ridged; the casing slopes strongly inwards and is slightly concave (pl. XVI, *a*). On the near-contemporary Temple of Concord, the form is more like that of Mars Ultor (pl. XIX, *a*); the concave casing slopes inwards, but the tongue is not as deeply cut as on Castor.

The later history of the motif need not be followed in detail here. It suffices to say that the prevailing form of the Julio-Claudian period is based on the late Augustan form (*e.g.* pl. XVI, *b*). The shallow tongue is more common, and the casing invariably slopes inwards, in the characteristic way. In the late Julio-Claudian period[69] the 'tongue' gives way to the 'dart' which prevails in the Flavian and early Trajanic periods and a completely different treatment of the casing is introduced. Although the egg-and-tongue is revived in Trajanic and early Hadrianic buildings, the detail of the tongue and the form of the casing can never be mistaken for Augustan examples.[70] The only possible date for the Castor ovolos, judging from the detail of the casing and of the tongue, is late Augustan or early Julio-Claudian.

The *cyma reversa type C* appears twice on the Castor entablature, once to crown the modillions and once to divide the upper fasciae of the architrave (pls. VI, *c* and VIII, *a*).

The characteristic detail of the Augustan form of this motif is the cross-section of the leaf surfaces. The buildings of what we may call the 'Early Decorated Period' of Roman marble architecture again form a convenient starting point for the study of the motif. In the Temple of Apollo *in Circo* the basic form of the motif, a series of leaves linked together by an arching connexion, is clearly preserved. The midribs of the leaves are indicated by grooves opening up to a slight wedge at the top. The leaf surfaces are slightly concave on either side of ridges flanking the midrib groove (pl. XV, *a*). This characteristic cross-section of the leaf remains throughout the Augustan period. In the larger order of the Basilica Aemilia the midrib and opening at the top are more deeply cut and much broader at the top

[69] One of the earliest examples of the 'dart' form on a Claudian (?) fragment in the Domus Augustana (M. E. Blake, *Roman Construction in Italy*, ii, pl. 10, fig. 4).

[70] Strong, *art. cit.*, p. 121 ff.

(pl. XIX, *b*). The same form appears in the Forum of Augustus, but the carving is much deeper. The form that appears on the entablature of the Temple of Castor is a development of the earlier Augustan examples. The motif is deeply carved, with a broad wedge at the top of the midrib; the profiling is typically Augustan, with concave surfaces on either side of the midrib and the edge of the leaf turned back to form a frame. The engraving round the edge of the leaf accentuates the effect of the frame.

The characteristic profiling of the Augustan version lasts into the Julio-Claudian period, but by Flavian times it has given way to a form with a more angular leaf and a more rounded space to accommodate the tongue.[71] The Trajanic and early-Hadrianic form may be studied on fragments from the Forum of Trajan. The Augustan version is clearly distinguishable from these and from all later examples of the motif.

The *cyma reversa type B* is used twice on the entablature—above the dentils and to crown the frieze. The two versions are similar in their basic form but differ in detail (pls. VI, *b* and VIII, *a*).

Cyma reversa type B, Form 1 (*over the dentils*). The motif consists of a series of arches constricted at the top to form a pear-shaped space into which fits the attachment for a pendant 'hanging' in the space below. The arches themselves are disconnected from one another; their section consists of a deep central groove flanked by two slightly concave surfaces (pls. VI, *b* and VIII, *b*). The pendants are floral forms based on palmette and lotus designs and rendered in leafy foliage; leafy flowers on stems fill the spaces between the arches.

The general history of this motif has been written by Weickert.[72] The Augustan development is complex. The earliest examples are distinguished by the thin, rather widely set and disconnected arches with very small upper loop, a form that still survives on the door-frames of the Basilica Aemilia (*c.* 14 B.C.) (fig. XV, *b*). Palmette and lotus pendants had already been introduced into this motif in the Hellenistic period, and those of the Temple of Apollo *in Circo*, a version with basically the same shape of arch as Castor, combine leafy filling between the arches with leaf and lotus pendants (pl. XV, *a*). In the Forum of Augustus a form based on the classical Greek version with connected arches is used on the coffering of the Temple of Mars Ultor (pl. XVIII, above), while the disconnected arches in conjunction with leafy filling ornament appear on the architrave (pl. XVIII, below). On the cymatia of the Forum colonnades, the basic design of the arches is very similar to that of Castor, but plain 'tulips' and pendants are used. A close comparison for the deeply grooved arches of Castor is found on the motif framing the shield panels of the Caryatid order of the Forum colonnades (pl. XVII, *a*).

Cyma reversa type B, Form 2 (*crowning of the frieze*). The shape is basically the same as that of Form 1, but the upper loop is rather broader and the arches set wider apart. The cross-section of the arches is concave but not deeply grooved like Form 1; and the filling ornaments are lotus buds rendered in leafy foliage. The cross-section of the arches is very like that of Mars Ultor (architrave) and Concord (cornice), both of which also have foliage filling ornament.

[71] See examples in von Blanckenhagen, *op. cit.*, pl. 28, 78, pl. 37, 101.

[72] K. Weickert, *Das lesbische Kymation*, Munich, 1913.

The *astragals* (e.g. pl. VI, *b*), which consist of an oval 'bead' and 'reels' composed of two bi-convex discs, are not particularly helpful in determining the date of the entablature. Certain forms of the motif such as the plano-convexdisc'reels' of earlier Augustan architecture (*e.g.* the Temple of Apollo *in Circo* and the lower order of the Basilica Aemilia), the 'cotton reel' motif of some Flavian entablatures, and the very narrow, finely carved discs of Trajanic and Hadrianic astragals, are distinctive. The Castor form with broad bi-convex discs and rather long bead does not seem to have been used before the Forum of Augustus. Prior to that plano-convex discs and a rounded oval bead had been the general rule and some unusual variants are found. The Castor type is used on the Temple of Concord and on most Julio-Claudian entablatures, although broad plano-convex discs, approximating to the Flavian 'cotton reels,' become increasingly popular.

The *dentils* (pl. VIII, *b*) are the dominating feature of the bed-mould of the cornice. They are high (30·5 cm.) in proportion to their width (21 cm.); the interstices are approximately half the width of the dentils. In all Augustan entablatures the dentils are tall in proportion to width, but in the earlier period (30–10 B.C.) the interstices are usually narrower. The proportions of the Castor dentils are identical with those of the colonnades in the Forum of Augustus and very similar to those of the Temple of Concord and other late Augustan entablatures. The scale and proportions of the Castor dentils make a convincing argument for an early date; in later entablatures the dentils tend to be more squat and much smaller in proportion to the decorated mouldings. However, the most distinctively early feature is the detail of the recessed bar in the interstices. This feature seems to derive from the partially carved interstices of earlier Augustan entablatures, in which the section may be rectangular,[73] curved[74] or sloping.[75] A similar bar first appears in the entablatures of the Forum of Augustus colonnades (pl. XVI, *a*), where the section is precisely the same as in the Temple of Castor. The distinction between this detail on Augustan work and imitations of the Trajanic and Hadrianic periods has been discussed in a previous article.[76] The Augustan form is used on a large number of Julio-Claudian entablatures, after which it disappears in favour of the 'arch and rings' motif.

The *modillions* (pl. VII, *b*). The history of the modillion in the Augustan period is the subject of a forthcoming article by one of the present writers.[77] A brief survey of its conclusions will, however, be useful in the present context.

The modillions of the earliest marble entablatures in Rome were severely plain; two profiles, represented by the modillions of the Regia and the other by those of the Temple of Apollo Palatinus, were in common use. The second type, with the addition of acanthus-leaf ornament to the underside, was used for the cornice of Apollo *in Circo* (pl. XV, *a*), the Parthian Arch of Augustus and the lower order of the Basilica Aemilia. The classical scroll bracket, based on the form used on the north door of the Erechtheum, makes its appearance on the Temple of Mars Ultor and, combined with acanthus leaf on the underside, produces the fully

[73] *E.g.* Regia (Toebelmann, Taf. 1).
[74] *E.g.* Divus Julius (*ibid.*, Abb. 7).
[75] *E.g.* Parthian Arch of Augustus (*ibid.*, Abb. 16).
[76] Strong, *art. cit.*
[77] A brief discussion of Roman modillions is to be found in *Opuscula Archaeologica*, vi, 1948, pp. 145–156.

developed Roman modillion, exemplified by those of the Temple of Castor. Other contemporary buildings, *e.g.* the Temple of Concord, use a more elaborate version of the Mars Ultor modillion (pl. XIX, *a*), but the Castor type becomes eventually the established form. A 'terminus post quem' for the modillions of Castor is the Temple of Mars Ultor; the 'terminus ante quem' is provided by the details of the leaf carving which may be compared with that on the capitals (p. 15). The design and decoration of the coffers between the modillions also provide a valuable indication of date. The rosettes in the recessed panels closely resemble those of Mars Ultor (pls. XVII, *c*, and XVIII) and Concord (pl. XIV, *a*). More significant is the fact that it is only on the entablatures of Mars Ultor, Concord and a few other contemporary buildings that we find the recessed panel of the coffers framed by a decorated moulding, a strongly classical feature that one finds, for example, on the coffers of the Tholos at Epidaurus.[78] Later, even in entablatures as elaborate as those of the temples of Vespasian and of Venus Genetrix (Flavian), the Capitolium at Ostia (Hadrianic) and the Hadrianeum (early Antonine), the coffer recess is never framed in this way.

5. *The Materials and Methods of Construction*

It remains to refer briefly to one or two aspects of the construction of the building that may have a bearing on the question of its date.

In the first place it should be remarked that the podium, in the form in which it has come down to us, was built to carry a temple of precisely the same form and dimensions as that of which the remains are still standing, and almost certainly of the same materials; and this podium, although it incorporates earlier structures, is unquestionably that of the Augustan building. These facts are most clearly demonstrated by the substructures of the three standing columns (pl. II, *a*). Beneath each column is a pier of travertine blocks which is patently contemporary with the two bodies of masonry into which it is bonded—on the inner side the concrete core of the podium, and on the outer side a facing of blocks of Anio tufa, which was itself faced with a thick veneer of Luna marble incorporating a series of shallow decorative pilasters. The lower parts of the other two faces of the travertine piers were dressed smooth, constituting a series of flat-arched, rectangular, *taberna*-like recesses between the pilasters of the marble façade. This is a carefully contrived scheme, planned and built on a single occasion, and as has long been recognised it bears all the marks of its Augustan date. The distrust of the load-bearing properties of concrete and reliance upon traditional materials are typical of late Republican work (later architects would have been content to insert a seating of one or two courses of travertine blocks into the top of the concrete mass), whereas the marble façade, which is an integral part of the scheme, would have been impossible before the thirties of the first century B.C.

The podium, as we now see it, is certainly Augustan; and it is almost certain that it was built to carry a marble superstructure. Not only does the marble facing of the podium imply *a fortiori* a marble building upon it, but the dimensions

[78] P. Cavvadias, *Fouilles d'Épidaure*, vol. i, Athens, 1891, pl. V, and G. Roux, *L'Architecture de l'Argolide aux IV^e et III^e Siècles avant J. C.*, Paris, 1961, pl. LI.

too, as indicated by the span between the columns (3.80 m.), are those of the new, marble architecture, which made possible the erection of classical colonnades on a scale far beyond the capacities of the late Republican architect working in traditional materials. There can be very little doubt that the Augustan temple was of marble. On the hypothesis of a late Flavian or Trajanic reconstruction one would have, therefore, to suppose either that this marble building was completely swept away to make way for another, of the same material but in some way more satisfying to contemporary taste, or else that the later building was a partial restoration of its predecessor after some unrecorded catastrophe. Historically speaking, the latter is the simpler supposition. But a restoration rather than a radical replacement implies the retention of some elements of the earlier building; and not only is there no trace of a diversity of periods in the surviving remains, but it is also the essence of the argument for a late-first-century rebuilding that those remains can all be recognised as belonging stylistically to this later period. One is driven, therefore, to accept the alternative of a radical reconstruction, involving the whole superstructure, and this, on reflection, is surely a most unlikely hypothesis. When Trajan (or Domitian) ordered the replacement of the Temple of Venus Genetrix, and when Hadrian undertook to rebuild the Pantheon, they were replacing structures which in their materials or plan, or both, were already outmoded. In the case of the Temple of Castor, on the other hand, the new building not only must be supposed to have followed the plan of its predecessor, and to have used the same materials, but also to have done so in a style that deliberately set aside those elements of contemporary taste which might conceivably have justified so expensive an undertaking. This is not impossible, but it certainly does seem to be most improbable.

The marble both of the podium facing and of the surviving superstructure is from the quarries of Luna. It was above all the exploitation of these quarries that made possible Augustus's celebrated boast that he had found Rome a city of brick (*sc.* crude brick) and left it a city of marble; and although the Forum Augustum, with its columns of African, Greek and Phrygian coloured marbles and its many-coloured pavements is evidence that the tide had already begun to set in favour of more variegated architectural colour-schemes, the Temple of Mars Ultor is enough to show that for the centrepiece of this great undertaking Augustus still preferred to use the gleaming white Italian marble of which he had done so much to expand, if not indeed to initiate, the production. So far as the evidence permits us to generalise, Luna marble remained throughout the first half of the first century A.D. the standard building material for all those Imperial monuments in Rome for which marble was the appropriate material. Thereafter it began increasingly to be replaced by other types of marble. Not only was there an ever-increasing use of coloured columns for the façades as well as for the interiors and secondary colonnades of major public buildings, but in the field of white marble Pentelic, and later Proconnesian, began to take the place of Luna. That this was a matter of taste, not merely of the economics of production, is well shown by the Arch of Titus, of which not only the sculptured panels but also the whole of the lower and more accessible part of the structure was of Pentelic marble; only the upper part was of Luna.

One cannot argue from this that the Temple of Castor must have been of Augustan rather than of Trajanic date. The transition did not take place overnight, and as late as the turn of the century we find at least one comparable building, the Temple of Venus Genetrix, of which the peristasis seems to have been built entirely of Luna marble (the cella, on the other hand, certainly incorporated elements of Greek marble). But in this respect Venus Genetrix was certainly not representative of its age. To build a large, Imperially-dedicated building of this sort in Luna marble would have been the rule at the beginning of the first century A.D. By the end of the century it would have been the exception.

Finally, a brief reference to one distinctive structural feature of the entablature, namely the fact that the architrave is cut with oblique joints, constituting in effect a series of flat relieving arches over the voids between the supporting columns. In Asia Minor the device was used quite commonly to take the weight off the lintels of large, flat-headed doorways; and a well-known instance of its use in an entablature is in the architrave of the portico round the post-A.D. 63 Forum at Pompeii. In the latter form it is hard to detect any regional or chronological pattern in the distribution of the surviving examples. There are, however, at least two earlier examples in Rome, the even more elaborately contrived flat-arch construction of the surviving order of the Tabularium façade, built in 78 B.C. and the frieze over the pronaos of the Ionic temple in the Forum Boarium.[79] Its use in the Temple of Castor is no indication of date, but at least one can be sure that it would not have been out of place in an Augustan building.

6. *The Date and Significance of the Building*

From the foregoing analysis of the various elements of the Temple of Castor it will already be evident that not only are several of the arguments put forward for a late Flavian or Trajanic date very precariously founded, but that there are also many features that can only be explained if the building of which we see the remains today is that reconstructed by Tiberius and dedicated in A.D. 6. The hypothesis of an otherwise unattested Trajanic reconstruction can be confidently rejected in favour of the traditional dating.

The conclusion is important in the first place as re-establishing the testimonials of one of the limited number of Augustan buildings in the capital that have come down to us. We are not so rich in these that we can afford to be in any doubt about those which we have got. There are, however, other and wider implications. The very reasons that have led von Gerkan and others to question the accepted Augustan dating gain new significance if that dating be accepted. As was remarked in the introductory section, the essential presupposition of the attempt to assign a later date to the Temple of Castor is a belief that there was a single, homogeneous style of Augustan architectural ornament. The fact that this building, dedicated a mere eight years after the Temple of Mars Ultor, could differ from it in so many important respects, is in itself quite sufficient evidence of the falsity of any such belief.

[79] Delbrueck, *op. cit.*, i, p. 35. E. R. Fiechter, *Röm. Mitt.* xxi, 1906, Taf. IX (cf. also Taf. VIII, in the architrave, but rather irregularly).

It is true that from one point of view Augustan architecture in general, and architectural ornament in particular, may seem to be remarkably conservative, harking back as it so often did to earlier classical models. But such a view is apt to disregard another and hardly less important aspect, namely its very great variety and the extraordinary amount of detailed experiment that took place within the broad framework of conventional classical practice. Some of the new ideas never really caught on; others, such as the composite capital, had to wait half a century or more before passing into general use. But the seeds of so much of the later development are to be found already present in the architecture of the Augustan age that it may without exaggeration be claimed as the great moment of original experiment in the field of Roman architectural ornament.

The Augustan age was a critical moment in the history of Roman architecture, and the Temple of Castor is one of the key monuments of the period.

D. E. Strong.
J. B. Ward Perkins.

APPENDIX

The Mantua Relief—A Note

The fragment of a marble frieze in the Palazzo Ducale at Mantua (pl. XX) is one of the best known examples of Roman historical relief-sculpture. In the early sixteenth century the fragment was in Rome in the possession of the collector G. Ciampolini; a little later it was bought, with the rest of Ciampolini's collection, by the painter Giulio Romano, who took it with him to the Court of Mantua in 1524.[78] The frieze is architectural and is carved in one piece with its architrave which now survives as far as the decorated moulding dividing the top fascia from the one below. It may be deduced from the quality of the workmanship and the scale of the piece that it derives from a major Roman public building.

The fragment has been variously dated. Bieńkowski[79] thought it was Augustan and suggested a connexion, which has received no confirmation from the recent excavations, with the Forum of Augustus or the Forum Iulium. Sieveking,[80] Rodenwaldt[81] and A. Levi[82] put it much later in the sequence of Roman historical reliefs and thought that the style was Flavian or Trajanic. The truth seems to be that in the field of Roman relief sculpture style alone is hardly ever a sufficient [illegible] of date. Widely different dates can still be argued with equal conviction, and as a result the Mantua relief has never found a certain place in the history of Roman sculpture. The detail of the ornamental profiles of the architrave, however, provides a more objective criterion for dating and, in fact, allows only one possible date. It also enables us, but with far less certainty, to suggest a provenience for the piece.

Only von Blanckenhagen[83] has previously considered the detail of the architectural ornament, and he reaches the following conclusion: 'Das schöne Mantuaner Friesfragment, das heute allgemein flavisch datiert wird, ist sicherlich nach 100, aber auch nicht wesentlich später als 100 entstanden. In flavischer Zeit gibt es keine Architravornamentik, bei der die Glieder des Kymas und des daruntersitzenden Astragals korrespondieren und der Bierstab ohne Pfeilblatt gebildet ist. Andererseits setzt das Ornament auch flavische Ornamentik [illegible] von der es noch die starke Unterschneidung bewahrt hat.'

The negative side of this argument is quite convincing but the choice of a post-Flavian date rests [illegible] nothing more secure than a stylistic analysis of the reliefs and von Blanckenhagen offers no

[78] A. Levi, *Sculture greche e romane del Palazzo Ducale di Mantova*, Rome, 1931, p. 75 ff. (no. 167).
[79] P. R. von Bieńkowski, *Die Darstellungen der Gallier in der hellenistischen Kunst*, Vienna, 1908; and 'Über Fragmente eines F[illegible] in Mantua und Rom' in *Strena Buliciana*, 1924, p. 35 ff.
[80] A. Sieveking, 'Das Römische Relief' in *Festschrift Paul Arndt*, pp. 27–28.
[81] G. Rodenwaldt, *Die Kunst der Antike*, p. 599.
[82] *Op. cit.*, p. 78.
[83] P. H. von Blanckenhagen, *op. cit.* (n. 7), p. 141.

comparative material for the detail of the ornament from the period shortly after A.D. 100. His attribution, therefore, is far from conclusive.

The fragment, including the surviving portion of the architrave, is 84 cm. high; the original height, allowing for a 3-fascia architrave, was probably a little less than one metre. The scale suggests that it comes either from the order of a small Corinthian building or from an interior order. The crowning mouldings of the architrave consist of a cyma reversa and astragal; the first and second fasciae are divided by an egg-and-tongue. The choice of profiles and decorative motifs is rather unusual. The cyma reversa type C is very rarely used in Roman architecture as a crowning for an architrave, and the ovolo is not generally used to divide the fasciae.[86]

The detail of the cyma reversa finds a striking parallel in the motif carved on the Temple of Castor in the Roman Forum; the close similarity is clear from a superficial comparison of pl. XX, b. The motif is deeply carved; the midribs of the leaves run down almost to the tips and open into a broad wedge at the top. On either side of the midrib the leaf surface is slightly concave and round the rather angular outline of the leaf a fine line is engraved to accentuate the effect of a slight turning back of the leaf edge. The tongue is deeply carved with a rounded head fitting into the circular space between the leaves and a sharply ridged surface. The profiles of both examples are strongly curved. The astragal below the cyma reversa on the Mantua fragment is also very similar to the version used on the Temple of Castor; the 'bead' is a very elongated oval in shape and the 'reels' are composed of two rather broad, almost lozenge shaped, discs. The ovolo is carved in every detail to precisely the same form as on the Temple. The pointed oval egg is framed in a deeply carved casing, slightly concave in section and sloping back strongly towards the surface of the egg. Between the casings, the tongue is deeply carved and strongly ridged, the surfaces on either side being slightly concave.

The similarity between the ornamental forms on the Mantua relief and the Temple of Castor are so striking that, at the very least, they must be nearly contemporary and it is surely highly probable that they are the work of the same group of craftsmen. The latter conclusion is, in fact, strongly suggested by the detail of the leaves in the cyma reversa since the engraved lines round the outline seem to occur only on these two examples. A slightly more elaborate variant is found on a small cornice in the Magazzini of the Theatre of Marcellus in Rome which may be a work of about the same date.[87] No other examples of the detail seem to exist.

Although it is easy to [illegible] the striking similarities between the Mantua relief and the ornamental detail of the Temple of Castor, it may be thought very rash to argue that the relief, in fact, derives from the Temple. Yet the detail of the cyma reversa is so curious and so rare that such an attribution seems to me very attractive. If it is true, we have, presumably, a fragment of a frieze that decorated the interior of the building, similar in character to the frieze from the interior of the Temple of Apollo *in Circo*. The subject, an encounter between Romans and Gauls, would represent some campaign appropriate to the context. The date of the Temple of Castor is fully argued in the preceding pages where, on the basis of a detailed analysis of the architectural decoration of the building, the surviving remains are assigned to the restoration carried out by Tiberius in the reign of Augustus and completed in A.D. 6. The dating of Castor carries with it the dating of the Mantua relief.

If, as I have suggested, the relief does derive from the interior of the Temple, what encounter between Romans and Gauls does the sculpture represent? The Temple was dedicated by Tiberius in his own name and that of his dead brother Drusus and the restoration was presumably paid for 'ex manubiis.' The campaigns of Tiberius and Drusus against the Raeti and Vindelici or against the Germans might therefore be a very appropriate subject for the reliefs decorating the interior. But although, since the discovery of the reliefs from the Temple of Apollo, we have come to think of historical relief sculpture as appropriate to the interior decoration of Roman temples, the commemoration of events in the life of the dedicator might seem presumptuous in the case of a restoration carried out to a building of such venerable antiquity.

An alternative is that the relief does not represent contemporary events at all but refers to one of the famous epiphanies of the Dioscuri connected with Roman military history. Popular belief knew at least three such occasions—at the Battle of Lake Regillus[88] at Pydna[89] and in Marius' defeat of the Cimbri and Teutones in the Raudine Plain. On the day when the last battle was fought two laureate youths appeared before the *aedes Pollucis et Castoris* and handed letters to the praetor.[90] It is hard to think of a subject more appropriate to the interior decoration of the principal shrine dedicated to the divine twins than the campaigns in which they were believed to have taken

[86] See above, p. 20.
[87] It is unpublished, so far as I know.
[88] Cicero, *De Natura Deorum*, II, 6.
[89] Valerius Maximus, I, 8, 1.
[90] Florus, III, 3, 20.

part on the Roman side. In offering this suggestion, it must be emphasised that there is no detail of the iconography which enables us to connect the scene with any particular event in history. The frieze is a Hellenistic battle-picture, a composition of traditional figures and poses in which the only reference to Roman history lies in the armour of the infantry and cavalry who dominate the falling or fallen barbarians. The subject is a rout in the grand manner and might as easily have been carved for the court of Pergamon as for a Roman temple.

The importance of the comparison of the fragment with the Temple of Castor lies not in the possible identification of the scene nor even with the probable attribution to the Temple itself, but in the firm dating of the sculpture to the late Augustan period. Hitherto the antecedents of the magnificent Trajanic sculptured battle pictures, though they must be assumed in Roman art, have never been clearly recognised. Only the tentative single combats of the frieze from the Temple of Apollo *in Circo*[81] and a fragment probably from the Triumphal Arch of Claudius drawn by Pierre Jacques[82] survive to bridge the gap between the Hellenistic Celtomachies and the Great Trajanic frieze. If the firm Augustan dating of the Mantua relief is accepted, it must become one of the central works of Roman relief sculpture.

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Acknowledgment.—We wish to record our indebtedness to Professor Gianfilippo Carettoni, who kindly allowed us to take advantage of the scaffolding erected a few years ago against the Temple of Castor, and to Mr. M. H. Ballance, who was able thereby to take the excellent photographs illustrated on plates III–VII; to Professor A. M. Colini, who allowed us to reproduce a number of photographs from his as yet only partially published excavation of the Temple of Apollo *in Circo;* and to the Fototeca dell' Unione and its Director, Dr. Ernest Nash, as well as to those other institutions whose photographs are acknowledged individually on the several plates. The drawings reproduced in figures 1–3 were prepared by Miss Vanessa Wills.

[81] Unpublished as yet; the section of the frieze showing a triumphal procession is now fairly well known (*e.g.* Strong, *op. cit.*, n. 54, pl. 31).

[82] S. Reinach, *op. cit.*, p. 121, pl. 29.

Q. CERELLIUS APOLLINARIS, PRAEFECTUS VIGILUM IN A.D. 212

(Plate XXI)

THE inscription of Q. Cerellius Apollinaris transcribed below is in the garden of the Casale Santa Cornelia, in the territory of ancient Veii. When it was found and where, except that it was on the Santa Cornelia estate, are both uncertain. It may have come from a tomb in the area—in which case Apollinaris presumably owned property there; but much the most likely findspot is the eighth-century church and estate centre of Capracorum, from which a number of ancient stones at the Casale derive. The site of Capracorum, founded by Pope Adrian I in *c.* 780,[1] has recently been identified on the Santa Cornelia estate and is in the course of excavation by the British School at Rome. A considerable quantity of the building material used there was demonstrably brought from Rome, and there is a real possibility that this piece, too, came from the city rather than from the neighbourhood.

Two adjoining pieces of a moulded panel of Luna marble, chipped along the break, the top missing (0·885 × 0·45 × 0·08), inscribed on one face.

Letters, third century: l. 2, 0·055; ll. 3,4, 0·04; ll. 5,6, 0·045; l. 5 probably added after the completion of ll. 1–4, but in a hand that is barely if at all distinguishable; l. 6 certainly added after the rest, in a distinguishable hand, with indifferent layout and alignment, its final two letters written vertically $\frac{U}{S}$.

Photo: *BSR* 6 × 9. 4784.

[D(is) M(anibus)]
Q(uinti) Ç[erellii Apo]llinaris c(larissimae) m(emoriae) u(iri)
praef(ecti) [ui]g(ilum) proc(uratoris) rat(ionis) priuat(ae)
proc(uratoris) Lud(i) M(agni) trib(uni) coh(ortis) V pr(aetoriae)
et Cerelliae Veranillae c(larissimae) m(emoriae) f(eminae) fil(iae)
et Aureliae Veranillae c(larissimae) m(emoriae) f(eminae) eius

L. 1. It is unlikely that more than one line is lost at the beginning; *d(is) m(anibus)*, to be followed by the names of the dead in the genitive case, is, therefore, an almost certain supplement.

L. 2 ff. See *PIR*[2] C, 665; his name is completed from his daughter's *nomen* in l. 5 and from *CIL* VI, 1063, a dedication made in A.D. 212 when he was *praefectus vigilum*; the *praenomen* was not previously attested. His family and cursus are also revealed for the first time.

Of the family of Apollinaris nothing is known beyond the facts in the text. Since he was a praetorian tribune there is a reasonable probability that he was Italian or perhaps from a Western Province;[2] he is hardly likely to be connected

[1] *Liber Pontificalis* (ed. Duchesne), I, p. 501 f.

[2] For Italian officers in the praetorian guard after the reform of Severus, see *e.g.* A. Passerini, *Le coorti pretorie* (Roma, 1939), p. 172, and H. G. Pflaum *Les procurateurs équestres sous le haut-empire romain* (Paris, 1950), p. 262.

—at any rate closely—with the Senatorial family of Cerellii or Caerellii, several of whose members fell victims to Septimius Severus in the aftermath of the defeat of Clodius Albinus.[3] His wife's family is equally unknown.

His civil career is of particular interest since it adds one to the group of ex-officers of the praetorian guard in the equestrian service which is sparsely represented in our evidence for this date.[4] It seems, moreover, to show certain features that are of interest in themselves.

The stages of the cursus before the praetorian tribunate are omitted here, no doubt as insignificant in the light of what Apollinaris eventually became.[5] From the tribunate he moved to the ducenarial post of *procurator Ludi Magni*, which is classified by Pflaum in the second grade of ducenarial posts[6]—a ducenarial posting is usual for a former praetorian tribune (although he would often have served first as *primus pilus bis*),[7] but one in the lowest grade of such posts would have been expected. Apollinaris also omitted the third grade—a less unusual jump[8]—and went next to the trecenarial post of *procurator rationis privatae*, thence to be *praefectus vigilum* and finally entered the Senate, as is indicated by his title *c.m.v.* His promotion thus appears to have been unusually rapid; and he is also notable for his continued tenure of offices in Rome, for Pflaum finds that the strong second-century tendency to send former praetorian tribunes to praesidial procuratorships in the provinces or to commands of the fleets was continued in the third, although the pattern then became much less rigid.[9]

While some unusual features in a career may well be due to accident, there [redacted] to be enough of the exceptional here to tempt speculation that Apollinaris may have owed his earlier promotions to some outstandingly loyal service as a praetorian officer.[10] His ultimate promotion into the Senate might be a reward for steadiness in the awkward period after the murder of Geta in February 212.[11]

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[3] *PIR*[2] C, 666, 667, 668; see *SHA, V. Severi*, 13, 6.

[4] See Pflaum, *loc. cit.*

[5] For the third-century tendency to omit posts of lesser importance, see Pflaum, *op. cit.*, p. 265.

[6] Pflaum, *op. cit.*, pp. 253–254.

[7] Pflaum, *op. cit.*, pp. 238–239 for the second century, p. 276 for the third.

[8] There are a number of third-century instances of promotion to a trecenarial post after only one of ducenarial grade, see Pflaum, *op. cit.*, p. 280.

[9] Pflaum, *op. cit.*, p. 237 for the second century, p. 269 for the third.

[10] In the early years of Severus's reign in particular there were no doubt many opportunities calling for devotion to the new regime; a specific occasion rather later might be the fall of Plautianus in 205.

[11] Apollinaris is attested as *praefectus vigilum* on 19 April, 212, see *CIL*, VI, 1063; his last known predecessor is attested on 4 April, 211, see *Eph. Ep.*, VII, 1207, and he had already been in office for at least a year, see *CIL*, VI, 1058, 1059.

VOTA PRO SALUTE PRINCIPIS

(Plate XXII)

THE major source for the vows and sacrifices made annually on 3 January for the safety of a Roman emperor and his family, and on some other occasions in special circumstances, is in the Acta of the Arval Brothers which preserve, for a number of years in the first, second and third centuries A.D., accounts of these ceremonies conducted by the Arvals, including the formulae of their prayers.[1] There is literary evidence to show that similar ceremonies took place throughout the Empire,[2] but for their form outside Rome nothing very detailed. Pliny[3] reports their observance in his province in terms which reflect very summarily the general tenour of the prayers; and the *Feriale Duranum*, col. I,[4] lists the sacrifices to be made on the 3rd of January by a military unit in the early third century. The two very fragmentary inscriptions from Cyrenaica published below make, therefore, a useful addition to our knowledge of the subject by showing that the prayer formulae used there were identical with those of the Arvals; and it is perhaps of some significance also to the study of Rome's relations with the provinces to establish that, in what is almost certainly a civilian context, and in a Greek-speaking province, these ceremonies followed a characteristically Roman pattern, and that the prayers were both made and recorded in Latin.

1. Fragment from the right side of a marble stele (0·21 × 0·20 × 0·175 m.) inscribed on one face, which has been badly and probably deliberately defaced. Probably found during Italian excavations in the Agora of Cyrene before 1941; brought from the Agora Square into Cyrene Museum in 1958.
Letters, perhaps first century A.D., 0·018.
Photo: *Department of Antiquities, Cyrene*: J.R. I. 45. Plate XXII, *a*.

```
        ...]        vac.
        ...]I nos sen
        ...] p(opuli) R(omani) Quiritium
   ... eue]ntumq(ue) bo[nu]m
5.      ...]R[..5..] astu ca ita faxis
        ...]XV [t]ibi datum uouemu[s]
        ...] quod hodie uouimus
        ...]        vac.
        ...] quod hodie uou[imus]
  [...
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I am most grateful to Dr. S. Weinstock for discussion of the texts published here, to Mr. M. H. Ballance for taking photographs of the squeezes, and to Mr. R. G. Goodchild for help in various ways, especially in the field.

[1] See W. Henzen, *Acta Fratrum Arvalium* (Berlin, 1874); A. Pasoli, *Acta Fratrum Arvalium* (Bologna, 1950). For a recent discussion of the origin of these *vota*, see L. W. Daly, *Trans. Am. Philol. Ass.*, 81 (1950), p. 164 f., and for an account of the relevant coin evidence, O. Ulrich-Bansa in *Anthemon* (*Scritti in Onore di C. Anti*) (Firenze, 1955), p. 185 f.

[2] *Cf. e.g.* Plutarch, *Vita Ciceronis* 2; *ILS* 4918; and notes 3 and 4 below.

[3] *Ep.* X, 35 and 100.

[4] R. O. Fink, A. S. Hoey and W. F. Snyder, *Yale Classical Studies*, VII (1940), p. 41.

By comparison with the Arval formulae this might be reconstructed as follows[5]:

... in ea verba quae infra scripta sunt]
[Iuppiter O(ptime) M(axime) si imperator ...? ... que]m nos sen
[timus dicere uiuet domusque eius incolumis erit a.d. III Non. Ian. quae proximae p(opulo) R(omano) Quiritibus reip(ublicae)] P(opuli) R(omani) Quiritium
[erunt fuerint eumque diem eosque saluos seruaueris ex periculis si qua sunt eruntue ante eum diem eue]ntumque bo[nu]m
[ita uti nos sentimus dicere dederis eosque in eo statu quo nunc sunt aut eo meliore seruaue]r[is] astu ea ita faxis
[tunc ...? ... donum auri (?) p. (*figure*) argenti p. (*figure*)] XV [t]ibi datum iri uouemu[s]
[Iuno Regina quae in uerba Ioui O(ptimo) M(aximo) boue aurato uouimus esse futurum] quod hodie uouimus
[astu ea ita faxis tunc tibi in eadem uerba boue aurata uouemus esse futurum] *vac.*
[Minerua quae in uerba Ioui O(ptimo) M(aximo) boue aurato uouimus esse futurum] quod hodie uouimus
[astu ea ita faxis tunc tibi in eadem uerba boue aurata uouemus ▬ futurum]

The gap in l. 1 was filled by the name of the emperor for whom the vow was offered; that in l. 5 possibly by a description of the community making the vow—*cf.* in the Arval prayer, at this point, the words *nomine collegii Fratrum Arvalium*—and/or by addition to, or more elaborate description of, the object(s) offered. In the Arval Acta, Jupiter is always offered a *bos auratus* and I have assumed in the reconstructed ll. 6 and ▮ that this was so here too. On the two known occasions when he was also offered *dona* (in A.D. 27 and 38, see Henzen, p. 101) these are promised in a second prayer which is recorded in the summarised form used to record the prayers to Iuno Regina and Minerva. Here the *donum* is offered with a prayer that is recorded in the full version, and we must suppose either that the full formula was repeated twice on the stone, the first version being wholly lost, or that *bos auratus* and *donum* were offered with one and the same prayer.

2. Fragment of a marble panel (0·08 × 0·18 × 0·025 m.) inscribed on one face. Found in 1955 during ploughing of an unexcavated area in the north-east part of the site of Ptolemais.
Letters, perhaps first century A.D.: 0·07–0·08.
Photo: *Department of Antiquities, Cyrene*: J.R. V. 52. Plate XXII, *b*.

...]
...]oq[...
...]a quae ▮...
...] futurum [...
...]m uerba b[...

[5] See Henzen, *loc. cit.*, p. 100 f.

...] quae in u[...
... fut]urum quo[d...
...]m uerba b[...
...]blica populi [...
10. ... sal]us public[a...
[...

By comparison with the Arval formulae, ll. 2–8 can be reconstructed as follows[6]:

[Iuno Regin]a quae [in uerba Iovi O(ptimo) M(aximo) boue aurato uouimus]
[esse] futurum [quod hodie uouimus astu ea ita faxis tum tibi in]
[eade]m uerba b[oue aurata uouemus esse futurum]
[Minerua] quae in u[erba Ioui O(ptimo) M(aximo) boue aurato uouimus esse]
[fut]urum quo[d hodie uouimus astu ▬ ita faxis tum tibi in]
[eade]m uerba b[oue aurata uouemus ▬ futurum]
[Salus pu]blica populi [Romani quae in uerba Ioui O(ptimo) M(aximo)]

L. 9 should complete the prayer to Salus Publica in the same terms as those to Iuno and Minerva that precede it. The only apparent explanation of the reappearance of the name Salus Publica is that the cutter repeated the line above —an error that is not perhaps very unlikely in ▬ monotonously repetitious a text.

L. 1 must be from the end of the prayer ■ Jupiter, but in the normal formula of the Arvals the letter group *OQ* does not occur in the appropriate position. It may be that a variant formula was used at Ptolemais, or again that there has been a cutter's error. Alternatively, this inscription records not the *vota annua* of 3 January but some special occasion, comparable with the *vota extraordinaria* offered by the Arvals during an illness of Nero, or again in 101,[7] where the recorded prayers included the words *primo quoque tempore* towards the end. If that were so the prayer to Jupiter here could be reconstructed on something like the following lines:

[Iuppiter O(ptime) M(axime) te precamur quaesumusque ut tu ... *c.* 10 ...]
[...?... ? in eo statu quo nunc est]
either [{ saluom incolumemque conserues et in reliquom malae valetudinis }]
or [{ aut eo meliori eum conserues eumque reducem incolumem victoremque }]
either [prim]o q[uoque tempore { praestes expertem } astu ea ita faxis
or { in urbem Romam sistas }
tum tibi boue aurato uouemus esse futurum]

The end of l. 1 and l. 2 will have contained the name and title of the emperor concerned.

The significance of the texts can be assessed within certain limits. Despite the difficulties of detail in no. 2, there is no doubt that like no. 1 it records a formula of prayer in Latin for which the only surviving parallels are the formulae of the Arvals for the *uota pro salute principis*. The date must in each case remain in doubt. Both texts appear to me to be written probably in the styles of the first century A.D.,

[6] See ▬ 5 above.

[7] See Henzen, *loc. cit.*, p. 122 f.

but it would be impossible to assert with any confidence more than that they are unlikely to be as late as the third century. Both at Cyrene and at Ptolemais there were military garrisons at various periods in and perhaps throughout the first and second centuries A.D., and it is just possible that the two inscriptions are records of their religious activity, to be considered, therefore, in the same light as the evidence of the *Feriale Duranum*. But while the original position of no. 2 is unknown, that of no. 1 appears to be the Agora of Cyrene; and a document from the civic centre of the city is most likely to record civic activity or possibly, since the city is the capital of the province, provincial activity. It would appear that even in ■ Greek-speaking city the *uota pro salute principis* might be made in Latin and in the peculiarly Roman forms used, for example, by the Arvals. If the ceremony was conducted by a Roman official that is natural; but it can hardly have been the case that a suitable official was always available in every town where it occurred. No. ▮ indicates that this was not only in the capital town of ■ province. It is, moreover, striking that on one occasion at least, both in Cyrene and in Ptolemais, the prayers were not only made but recorded on stone for display in the public places of these cities. If the texts survived more completely, a reason might be apparent. As it is we ▬ left with the fact that Cyrenaica has produced two inscribed records of the *uota* whereas, so far as I have been able to discover, no other province of the Roman Empire has yet produced any.

J. M. Reynolds.

SOME MILITARY INSCRIPTIONS FROM CYRENAICA

(Plate XXIII)

In his historical study of Roman Cyrenaica, published in 1942,[1] Professor Pietro Romanelli brought together the rather scanty information then available regarding the military garrisons of the Roman province.[2] The loss of the page of the *Notitia Dignitatum* listing the units under command of the Dux Libyarum makes us dependent almost entirely on epigraphic evidence; and whilst Cyrenaica has been proved rich in ancient inscriptions, only few of them refer to military matters. In the following paper are published some recently-discovered texts which help, if in somewhat limited fashion, to fill this void.

1. *Cohors Macedonica in third-century Cyrene*
(Pl. XXIII, *a*, *b*)

During excavation by the Department of Antiquities of Cyrenaica in 1958 in the central sector of the Valley Street or *decumanus maximus* of Roman Cyrene, there came to light a group of small temples which had been dismantled in the Byzantine period and their remains incorporated in ill-constructed houses of late date. Since [illegible] of the walls of the latter intruded on to the paving of the earlier street they were removed by the Department after being planned. One such Byzantine foundation, adjoining the earlier Temple 'G,' contained a large block

We owe grateful acknowledgements to all those with whom we have discussed the texts, especially on the military aspects to Professors Eric Birley and Giovanni Forni, and on linguistic points in Section 3 to Mrs. P. E. Easterling, Mr. John Parker and Professor Giovanni Pugliese-Carratelli.

[1] *La Cirenaica Romana* (Verbania, 1942), ch. XIII, p. 191 f.

[2] When he wrote he did [illegible] know that a second text referring to a *cohors Hispanorum* had b[illegible] found [illegible] Cyrene to add to the one already known (*AE*, 1915, 111); it will be published in our forthcoming *I(nscriptions of) R(oman) C(yrenaica)*. Examination of the two confirms the view of K. Kraft, *Zur Rekrutierung der Alen und Kohorten am Rhein und Donau* (Bern, 1951), p. 178, no. 1510, that the date of this cohort's assignment to Cyrene cannot be much later than [illegible] middle of the first century A.D. —letter forms and formulae both point to the same conclusion; Romanelli's attractive thesis, which [illegible] also that of W. Wagner, *Die Dislocation der römischen Auxiliarformationen in der Provinzen Noricum, Pannonien, Moesien und Dakien von Augustus bis Gallienus* (Berlin, 1938), p. 152 f., that it was during the Jewish revolt of A.D. 115, must be abandoned. If, as suggested by these writers, it is identical with the *cohors II Hispanorum Scutata Cyrenaica* of *CIL*, XVI, 110, and if this is identical with the *cohors II Hispanorum* stationed in Illyricum perhaps as early as A.D. 29 (see Wagner, *loc. cit.*, and *CIL*, XVI, 2, n. 1) and certainly by A.D. 54, it was probably part of the Augustan garrison of Cyrenaica. It may have been replaced in the later years of Augustus, perhaps by the *cohors Lusitanorum* which seems to be attested there between A.D. 4 and 14 (see Romanelli, *loc. cit.*; this text too will appear in *IRC*); or withdrawn without replacement, [illegible] a reduction in the garrison [illegible] a reasonable hypothesis after the effective conquest of the Marmaridae by Sulpicius Quirinius.

of limestone, which proved to be a base, measuring 0·52 × 1·47 × 0·40 metres, inscribed below a simple moulding in letters 0·04–0·05 m. high.

C(aio) Pomponio
Cordio proc(uratori)
Aug(ustorum trium) n(ostrorum)
Valerius
5. Valens prą[e]f(ectus)
coh(ortis) [I? M]aced(onicae)
praesidi opt[i]
mo et beni
gnissimo

Ll. 1–2. C. Pomponius Cordius seems a be otherwise unknown. He is the earliest procurator so far recorded in Cyrenaica, and his appearance at this time should probably be associated with the policy of Septimius Severus in extending the equestrian service (see H. G. Pflaum, *Les Procurateurs équestres sous le haut-empire romain* (Paris, 1950), p. 82 f.).

At Cyrene a procurator would probably be concerned with the administration of the *ager publicus* formerly handled by *publicani* (Pliny, *N.H.* XIX, 39); and he may be compared with the *procurator ad functionem frumenti et* a *populi per tractum utriusque Numidiae* (*ILS*, 9017) also concerned with *ager publicus* and regarded by Pflaum as a creation of Severus (*loc. cit.*, p. 88).

L. 3. Written AVGG[*G*] NN[*N*]. The emperors must be Severus, Caracalla and Geta, strictly between 209, when Geta received the title of Augustus, and 211, when Severus died; but Geta is not infrequently described as Augustus at an earlier date, especially in Africa, *cf. IRT*, 913–916.

Ll. 4–5. Valerius Valens may be identical with the homonym PIR V[1] 147, who was Prefect of the Fleet at Misenum and Prefect of the Vigiles between 241 and 244; but the combination of names is comparatively common.

L. 6. The space between COH and MACED is very narrow, and if any figure was given it must have been I.

Ll. 7 ff. For a discussion of the title *praeses*, applied to a procurator in a purely honorific sense in *c.* 160 A.D., see H. G. Pflaum, *loc. cit.*, p. 116. This is probably the meaning here, although it is just conceivable that Cordius had the authority of a governor, either because the series of proconsuls of Crete and Cyrene was temporarily broken or during the absence of the proconsul in Crete.

The same cohort's name had already appeared in a text found in 1934 by Professor Oliverio while excavating the early Christian 'House of Hesychius' on the Agora Hill. This text was inscribed on a moulded marble panel, measuring 0·72 × 1·07 × 0·02 m., which had been re-used, face downwards, as a paving-slab in a room adjoining the large cistern of this house. The inscription was not published, and although the stone had been photographed *in situ* with its face hidden (Cyrene Archive, no. F.5449) no record of the inscribed face was made. This was the [illegible] unfortunate in that the marble slab, already cracked at the time of discovery, was further broken in Cyrene Museum during the disturbances of

World War II, with the loss of several fragments. What remains is, however, sufficient to establish the text, which is cut in Rustic capitals 0·04–0·05 m. high.

[I]mp(eratori) C[a]es(ari) M(arco) Antonio Gordiano
[P]io F[elici Aug(usto) pon]tifici
Max[imo tr(ibunicia) pot(estate) (*figure*) coh(ors) I ?] Mac(edonica)
[G]or[di]ana [e]q(uitata)
v. d[euo]ta *v.* [n]umini
v. maiestatique eius
dedicante Caecilio Felice
v. u(iro) e(gregio) *v.* proc(uratore) *v.* eius
[c]ur[a]nte Drusinio Lupulo
[pr]aef(ecto) uic(e) II coh(ortis) *v.* eiusdem
v. ex euok(ato) *v.*

Ll. 1–2. The date is 238–244.

L. 3. The space for the number of the cohort cannot be calculated. As with the previous inscription, no such number may have been shown.

L. 7. Caecilius Felix is possibly identical with or related to C. Caecilius Felix *c.v.*, PIR² C, 45.

L. 9. Drusinius Lupulus seems to be otherwise unknown.

L. 10. The unusual *uic(e) II* must mean that Lupulus was prefect for two tours of duty, *cf.* the *beneficiarius iterata statione* of *ILS* 9327.

L. 11. Lupulus had previously been a soldier of the Praetorian Guard: promotion of such men to posts previously reserved for those who began their careers as equites is not uncommon in the third century.

It is hardly to be doubted that the *Cohors I Macedonica Gordiana Equitata* attested at Cyrene under Gordian is also the *Cohors I Macedonica* of the reign of Severus, which had in the meantime acquired the title *Gordiana*,[3] and had either become a mounted unit or was now advertising the fact that it was so. Clearly it formed the garrison of Cyrene in the early third century. How long it was stationed in Cyrene cannot be estimated. The only other clear reference to it is in the career of a Spanish knight (*CIL* II, 4232), and there is no indication there of the province in which he served. One might hazard a guess that it had been sent to Cyrenaica at the time of the Jewish Revolt and remained thereafter; but that is pure conjecture.

2. *A Vexillation of Legio III Augusta at Ptolemais*
(Pl. XXIII, *c*, *d*)

In 1957 the Department of Antiquities began the excavation of a large Roman courtyard building situated in the north-eastern quarter of Ptolemais (Tolmeita), beside the major *cardo* that runs from the Hippodrome and the 'Palace of Columns' towards the seashore. The excavation has still to be completed, and it can only be remarked provisionally that the building began its life early in the Roman period as a residence of some pretensions, and was modified in late Roman or Byzantine times to contain a large apsed hall of *triconchos* type, apparently of secular function.

[3] On ephemeral titles of this type, see G. Bersanetti, *Athenaeum*, XVIII (1940), p. 105 f.

During the excavation of some small rooms immediately north of the *triconchos* hall there came to light, out of any architectural context, an inscribed block of which the left-hand margin had been roughly trimmed, with resulting damage to the text. The trimming would seem to suggest that the inscribed stone does not necessarily belong to this building, but may have been brought from elsewhere on the site of Ptolemais to serve ■ building material in the late period.

The stone is of the characteristic compact sandstone used throughout Ptolemais, and its surviving dimensions are 1·00 × 0·66 × 0·38 metres. The inscription is within a raised *tabella ansata*, of which the left edge, with handle, is missing. The letters are 0·11 to 0·13 m. high, and with irregular forms probably of the third or even fourth century A.D.

Ped(atura) uexil(lationis) leg(ionis)
[I]II Aug(ustae) curante
Aur(elio) Muciano duc(?)

L. 1. For the term *Pedatura*, *cf. e.g. CIL* VII, 864, 948, 970; XIII, 4139, 4140, 6549, 7613. The detachment had been involved in building, probably, but not necessarily, of military installations; see R. MacMullen in *Harvard Studies in Classical Philology*, LXIV (1959), p. 218 f.

L. 2. The choice lies, we think, between II and [I]II Augusta; we do not think that there could have been room for [VI]II. In Africa it is difficult to believe that it can have been anything but [I]II.

L. 3. Aurelius Mucianus seems to be otherwise unknown. DV in ligature. The title may have been *duc(e)*, *cf.* the *dux uexillationis* of *ILS* 1142 (a man of senatorial rank), or better *duc(enario)*, used in the sense of an army grade (see *Dizionario Epigrafico*, vol. II, p. 2070 f. and 2078 f., vol. IV, p. 585, col. 1 and 600, col. 2); examination of officers mentioned in other *pedatura* inscriptions suggests that the latter is a more likely rank.

In the light of this newly-found text, one may venture to assign to a soldier of the same Third Augustan Legion a fragment of a tombstone found in 1935 by Professor Giacomo Caputo during his excavation of the Christian Church near the Porta Tcuchira. The stone (now unfortunately missing) had apparently been cut down by the Byzantine church-builders for re-use. A photograph in the Tolmeita archive is adequate to provide a reading, although measurements cannot be given.

M
S P F
VS BE
II AV
5. CL AI

Perhaps to be reconstructed as follows:

[D(is)] M(anibus)
[. . ? . .]s P(ubli) f(ilius) [. . .
[. . ? . .]us be[neficiarius . . .
[. . ? . . leg(ionis) I]II Au[g(ustae) . . .
5. [curante(?)] Cl(audio) A[. . .

L. 4. The figure here was certainly greater than II, since the horizontal line drawn over it continued beyond the surviving left-hand margin of the stone.

Neither inscription is satisfactorily dated. The lettering of no. 2 appears to be comparatively neat and well cut, perhaps of the second or early third century. The lettering of no. 1 is atypical in Cyrenaica and was clearly the work of a soldier, rather unskilled in the art of epigraphy. Not surprisingly it recalls military or para-military inscriptions from the frontier of Tripolitania, where standards of workmanship were certainly influenced by *Legio III Augusta* and other units of the African army; the period suggested is third-fourth century—certainly later than any date acceptable for no. 2.

It seems unlikely that a detachment of *III Augusta* was at any stage a long-term element of the garrison stationed at Ptolemais. Presumably such units were sent from time to time to meet a particular crisis—and there can be little doubt that barbarian invasions produced a series of such crises from about the middle of the third century onwards. The point of special interest seems to us to be that on occasion a unit was brought to deal with them from the West, across the long intervening space of the Syrtica. Throughout its history Cyrenaica was more closely connected with Egypt, with which it was eventually linked for military purposes; and in the one documented military crisis of the third century, in the reign of Claudius Gothicus, it was precisely from Egypt that help was brought.[4]

3. *The Memorial of 'Samphodion' at Bir Tarakenet (Ain Mara)*[5]
(Fig. 1)

Early in 1959 information reached the Department of Antiquities of the existence of a rock-cut chamber containing Greek inscriptions in the area of Ain Mara, close to the main road from Cyrene to Derna. The site was first seen and reported by Abdulkerim Hussein, an employee of the Department, and was later visited by R. G. Goodchild. In view of its unusual epigraphic features it was decided to excavate the whole chamber, which was nearly two-thirds buried in rain-washed soil and stones. The excavation was carried out in the summer of 1959, and the readings of the inscriptions were checked by both authors of this note. In the following year, owing to the difficulty of maintaining adequate supervision there, it became necessary to block up the entrance to the chamber and to fill in its entrance passage with soil.

The chamber is cut into the surface of the limestone plateau on the east side of the Wadi Tarakenet, about 1 km. south-south-east of the well (*Bir*) of the same name, and is not far to the north of the modern highway. The plateau hereabouts contains some rough stone boundary walls of ancient plantations, but there are no apparent signs of a farmhouse or village in the vicinity. Access to the chamber was by an open rock-cut stairway descending to a small and very simple doorway :

[4] *SEG*, IX, 9.

[5] We have to thank Mr. Abdulhamid Abdussaid of the Department of Antiquities for making the plan (fig. 1), and Mr. G. D. B. Jones who redrew it for publication.

in external appearance the site resembles hundreds of other ancient rock-cut chambers (mainly tombs) on the Cyrenaican plateau.

To the south of the entrance stairway, and opening off it, [redacted] two small rectangular chambers containing neither inscriptions nor *loculi*. Nothing was found within them to indicate the use to which they had been put.

The principal chamber, an irregular rectangle some six metres square (fig. 1), is approached by a small flight of steps inside the doorway. Only the floor space immediately in front of these steps is flat, the greater part of the interior of the chamber being taken up with rock-cuttings of industrial character, comprising the circular base of a rotary olive-crusher some 2 m. in external diameter, with shallow oil vats on either side of it. The excavation also yielded one of the twin millstones which had stood vertically within the crusher base, rotating when the whole apparatus was revolved, in this case by man-power. Rotary crushers of this type are still used in some parts of North Africa, notably in the oasis of Siwa.

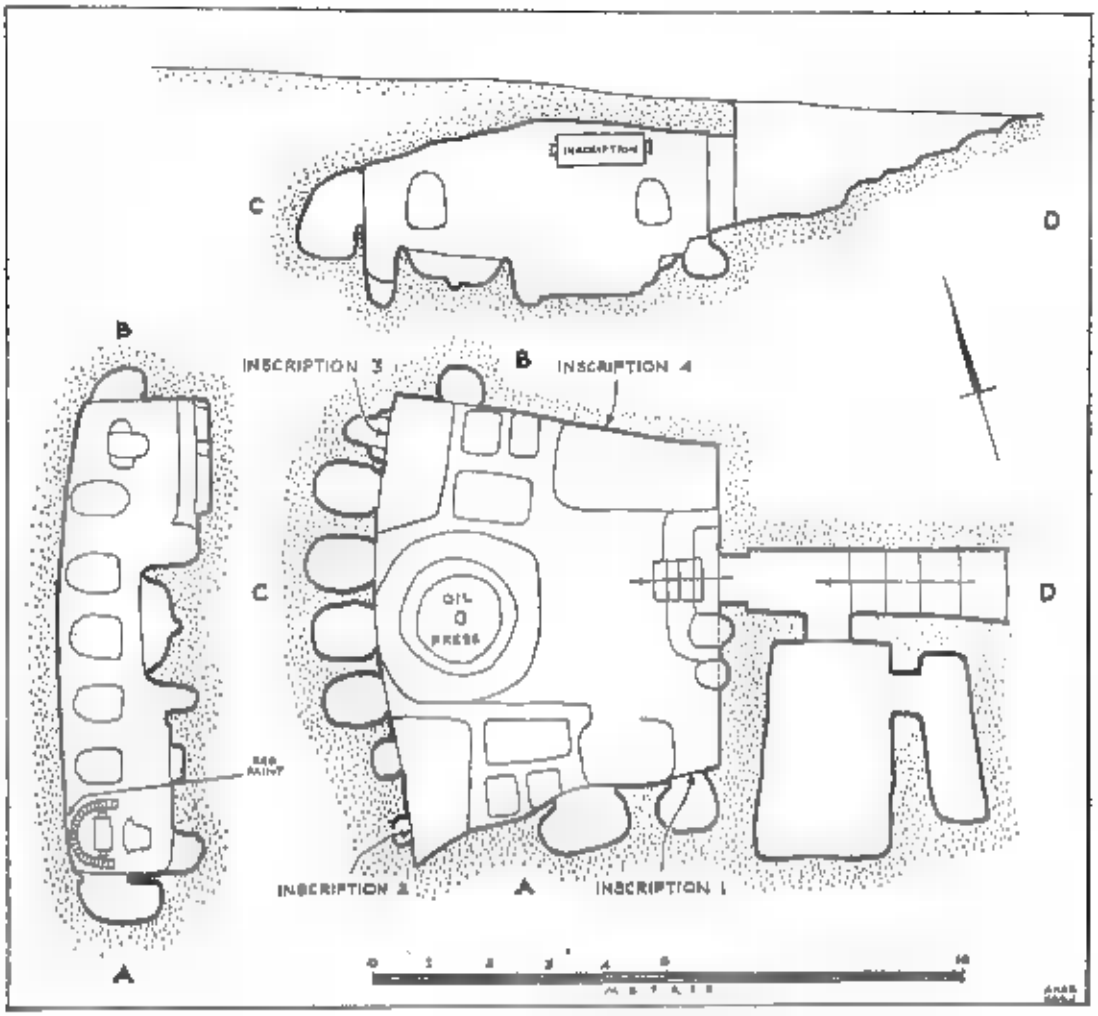
The relationship of these industrial features to the seemingly funerary elements of the complex will be discussed later. The latter consist of *loculi* cut into three walls of the chamber, but principally in the western wall opposite the doorway; and of remains of four inscriptions, three of them associated with *loculi*, and the fourth and major one not.

The *loculi* are of varying sizes, some being merely shallow niches; but even the four largest, in the west wall of the chamber, are barely a metre square in plan. Superficially they resemble mangers rather than tombs, and certainly no regular inhumations could have been made in them. Human skulls, probably of recent origin, were found in the uppermost earth filling of the chamber; but the absence of human remains in the *loculi*, or scattered at ancient floor-level, is noteworthy. Similarly there were no signs of closing slabs, whether of stone or of plaster, with which the *loculi* might once have been covered.

The inscriptions are sited as follows, as seen clockwise from the entrance to the chamber:—

1. Above the first *loculus* in the south wall. Cut and legible.
2. Above the first *loculus* in the west wall. Nothing legible.
3. Above the last *loculus* in the west wall. Painted, partly legible.
4. On the north wall, without *loculus*. Cut and legible.

Of inscriptions 2 and 3, little can be said. No. 2 is represented by a rectangular panel obviously prepared to receive a cut or painted text, but bearing no traces of letters. Above this panel are three monogram crosses and an arched border painted red. No. 3 has a similar layout, but with the letters X M Γ, for X*(ριστὸς ὁ ἐκ)* M*(αρίας)* γ*(εννηθείς)*, taking the place of the monogram crosses above the panel. The latter has horizontal setting-out lines for eight lines of text, and the first letter of the first line, an E, has been cut; but the remaining letters were all painted, and the traces that survive are too blurred to be read. Since the painting of the border around and above the panel is still vivid, one receives the strong impression that the painted text has been deliberately scrubbed out; and a similar erasure, more efficiently applied, may explain the lack of any visible text in no. 2. Indeed, the two cut texts, nos. 1 and 4, which we must now consider, may have



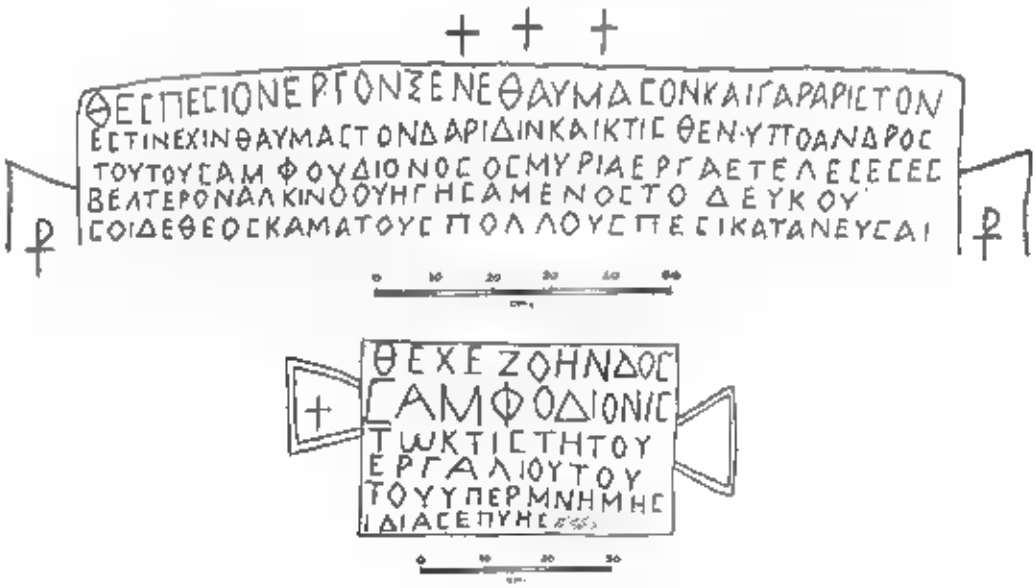


FIG. 1. ROCK-CUT CHAMBER AT BIR TARAKENET. INSCRIPTIONS 4 (*lines 1–5*) AND 1

survived only because it was too much trouble to obliterate their deeply incised letters.

Text 1 is cut within a *tabella ansata* (0·50 × 0·30 m.) in letters (0·03–0·05 m.) which are gauche but deeply cut, and appear to be in a rural version of a style of the sixth century A.D.

Θ(ε)ὲ Χ(ριστ)ὲ ζοὴν δὸς [*sic*]
Σαμφοδιφνι <Δ>
τῶ κτίστη τοῦ
ἐργαλῖου τού
του ὑπὲρ μνήμης
ἰδίας ἐπύησ[εν]

L. 1. *ζοή* can hardly be anything but the life hereafter and indicates the funerary intention of the text.

L. 2. Probably a cutter's error for *Σάμφω Δίωνος*, see also no. 4, line 3. *Σάμφος* does not appear to be formed from a Greek root; the names of the town *Σάμφη* in Phoenicia (Steph. Byz. *s.v.* *Σαμφαῖος*) and of the village *Σαμφώ* in Samaria (Jos., *Ant.*, XIII.10.9 and *B.J.*, II.5.1) might suggest a Semitic root.

L. 6. *ἐπύησ[εν]* for *ἐποίησ[εν]*, a common orthographic change.

We translate:

'Christ our god, give eternal life to Samphos son of Dion (? Samphodion) founder of this building. He made it as a memorial for himself.'

ἐργαλῖον is presumably used here in place of the *ἔργον* of no. 4, ll.1 and 10, *cf.* Suidas *s.v.* and perhaps *Exodus* 27.19. Its normal [redacted] of 'tool' is clearly quite irrelevant, but it may be pertinent that Hesychius *s.v.* reports it as used in the sense of *ἐργαστήριον* (? = workshop) at Tarentum.

Text 4 is also cut within a *tabella ansata* (1·47 × 0·46 m.) whose handles contain monogram crosses. There are three plain crosses above. The letters (average 0·04–0·05 m.) are very like those of no. 1.

θεσπέσιον ἔργον ξένε θαύμασον καὶ γὰρ ἄριστόν
ἐστιν ἴχνι θαυμαστὸν δ' ἀρ' ἰδῖν καὶ κτισθὲν ὑπὸ ἀνδρὸς
τούτου Σαμφουδιονος ὃς μυρία ἔργα ἀτέλεσσε ἐς
βέλτερον Ἀλκινόου ἡγησάμενος τόδε ὖκου
σοὶ δὲ θεὸς καμάτους πολλοὺς πεσὶ κατανεῦσαι
λεῖψαι καὶ γὰρ πᾶσιν συνευχομένυς τόδε ἔλδωρ
πρεπος ἰδίης γὰρ ἀρχὴν κατέχων ἐν Μαρύσ[οις]
ἦρξ' ὅδ' ἀθάνατον στήλην ἐνταῦθα (ἀ)κίρριν
κεῖθεν δὲ στρατηγὸν ἐχιροτόνησε πόλις Ε[. . . .]
καὶ τήν[δ' ἐ]ξετέλεσσα σᾶμα ἔργω σὸ ἐφεστώς

L. 2. *ἔχιν* for *ἔχειν*; *ἰδῖν* for *ἰδεῖν*.

L. 3. It would be natural to take the name here as Samphos son of Dion if it had not been written as Samphodion in no. 1, l. 2—but that is probably a cutter's error.

L. 4. *ὖκου* for *οἶκου*.

L. 5. *πεσί* for *παισί*.

L. 6. *συνευχομένυς* for *συνευχομένους*.

L. 7. *πρεπος* probably for *πρέπον*; *ἰδίης* probably for *ἰδίης γῆς*; *Μάρυσοι* perhaps for *Μαυρούσιοι*, *cf.* Procopius, *De Bell. Vand.*, II, 10.2, identifying Libyans and Maurousii.

L. 8. *ἀείρριν* for *ἀείρρειν*.

L. 9. *ἐχιροτόνησε* for *ἐχειροτόνησε*.

L. 10. *σύ* presumably for *σοί*.

The orthographic peculiarities noted above are easily paralleled in later Greek inscriptions.

For the reference to Alcinous, see, for example, Kaibel, *Epigrammata*, 1056; *ὄψεαι Ἀλκινόου προσφερέστερα δώματα πάντα*; and Aeneas of Gaza, *Ep.* 25: *τοῦ Ἀλκίνου τὸν κῆπον οἶμαι κεκτῆσθαι* ....

Noteworthy also are the attempt at versification and the poetic language, *e.g.* the epic words *ἔλδωρ* and (in an unusual form) *ἀείρω*, and the phrase *θαυμαστὸν ἰδεῖν*, for which see A. Wilhelm, *Hermes*, LXXVIII (1943), p. 207.

We translate provisonally as follows:

'Stranger admire this marvellous work, a splendid thing to own and wonderful to see. Its founder was this man Samphos, son of Dion, (? Samphodion), who accomplished much, making here something finer than the house of Alkinous. May God grant it to you too to leave great accomplishments to your sons, for that is indeed a fitting thing for him to give to all who pray for fulfilment of such a desire. For while he held office in his own land, among the Marysoi, he began to erect here an eternal memorial; but from here the city of E[....] elected him to be *strategos* and I was put in charge of your work and completed this as a record of you.'

The linguistic difficulties presented by these texts are equalled by the archaeological problems inherent in their setting. In the first place, we must consider whether the industrial installation of olive-crusher and vats is contemporaneous with the *loculi* and inscriptions, or an adaptation of later date. The industrial features are, as we have already noticed, rock-cut; therefore had the chamber once existed without them, its floor must have been at a substantially higher level. On the one hand, the rock-cut steps inside the doorway seem to support the supposition that the floor had been lowered; on the other, we must bear in mind that an original floor that was level with the top of the crusher-base would have provided less than 1·5 m. head-room at the back of the tomb adjoining the largest *loculi*. If the tomb was meant to be open to inspection—as the legible inscriptions nos. 1 and 4 might seem to imply—this head-room seems hardly sufficient. Moreover, the word *ἐργαλῖον* in inscription no. 1 might refer to a workshop rather than to a burial-place. Nor are the so-called *loculi* large enough to have contained normal inhumations. And yet the tenour of the surviving inscriptions does seem to be funerary.

In these circumstances we find ourselves unable to decide whether we are confronted with a family tomb converted, at later date, to an olive-press; or with an underground workshop which served also as a memorial to its founder and owner, Samphos or Samphodion, who had subsequently been elected as *strategos* by his *polis*, and whose memory was cultivated by his descendants.

It is unfortunate that the name of the *polis* has been lost on inscription no. 4. It must have been a short name, apparently beginning with E and one might think of *Erythron* (El-Atrun), a coastal village and bishopric some 10 km. to the north-west. On the other hand, the title *polis* was, at this late date, applied even to the most modest of Cyrenaican villages, of which there were a number in the area Gubba-Ain Mara whose ancient names are unknown.

Given these uncertainties, it may be said that the principal interest in the Bir Tarakenet 'Memorial' and its inscriptions lies in the reference to the election of a *strategos* by a late (? sixth century A.D.) community. His office perhaps derived ultimately from the *strategia* known in Hellenistic Cyrene,[6] which may well have survived in name in the civic constitutions of Cyrenaica throughout the Roman period. At this late date, in the context of constant barbarian invasions against which the official defences of the Pentapolis proved inadequate, it is likely to imply an effective, if *ad hoc* military command. Samphos or Samphodion was, if we have rightly interpreted his name and ethnic, a Libyan: we suggest that he was a sedentary Libyan who undertook the defence of his region against his own nomadic kinsmen. We may perhaps compare the position of Masties, the indigenous *dux et imperator* of an inscription found in 1942 at Arris in the Aures region of north-west Africa.[7]

The language of his monument, with the attempted sophistication of its Epic echoes and its intermittent versification, indicates the degree to which—for better or for worse—our Samphos or Samphodion had been assimilated into the civilisation of the Graeco-Roman world.

R. G. Goodchild.
J. M. Reynolds.

[6] See *SEG*, IX, I, § 4. It is unlikely that there is any connexion with the civil strategia of Roman Egypt.

[7] J. Carcopino, *Revue des Études Anciennes*, XLVI (1944), p. 94 f.

COSTS, OUTLAYS AND SUMMAE HONORARIAE FROM ROMAN AFRICA

SYNOPSIS

Symbols and abbreviations.

(All dates are A.D.).

Numbers thus: no. 56 indicate entries in the price-list.

* Testamentary outlay.

▬ Outlay by a city, its absence indicating outlay by an individual or individuals.

*** Private bequest administered by a city.

▬ Promise fulfilled by heir or descendant.

( ) when enclosing a figure indicates that its amount is inferred, and is not stated explicitly in the surviving text.

( ) when enclosing a place-name indicates a site whose ancient name has been lost.

[ ] encloses figures or letters in a text which have been restored.

\+ after a figure indicates that some increase in the amount is referred to in the inscription without being specified.

MC Mauretania Caesariensis.
MT Mauretania Tingitana.
N Numidia.
NP Numidia Proconsularis.
PB Proconsularis (Byzacena).
PT Proconsularis (Tripolitania).
PZ Proconsularis (Zeugitana).

AAA S. Gsell, *Atlas archéologique de l'Algérie*, 1911.
AAT Babelon, Cagnat, Reinach, *Atlas archéologique de la Tunisie*, 1893–1926.
AE *Année épigraphique.*
Apol. Apuleius, *Apologia.*
BAC *Bulletin archéologique du Comité des travaux historiques et scientifiques.*
BCB Boeswillwald, Cagnat, Ballu, *Timgad, une cité africaine sous l'empire romain*, 1905.
Bourgarel-Musso A. Bourgarel-Musso, 'Recherches économiques sur l'Afrique romaine,' *Revue africaine*, lxxv, 1934, pp. 491–520 (also pp. 354–414).
Broughton T. R. S. Broughton, *The Romanization of Africa Proconsularis*, 1929.
C *Corpus Inscriptionum Latinarum*, vol. VIII.
C/G R. Cagnat, F. Gauckler, *Monuments historiques de la Tunisie*, I, 1898.
Charles-Picard, *Civilisation*, G. Charles-Picard, *La Civilisation de l'Afrique romaine*, 1959.
Charles-Picard, *Religions*, G. Charles-Picard, *Les Religions de l'Afrique antique*, 1954.
CRAI *Comptes-Rendus de l'Académie des Inscriptions et BellesLettres.*
DS Daremberg et Saglio, *Dictionnaire des Antiquités.*
Econ. Survey, T. Frank (ed.), *An Economic Survey of Ancient Rome*, 5 vols., 1933–1940.
Gsell, *Monuments*, S. Gsell, *Les Monuments antiques de l'Algérie*, 2 vols., 1901.
Haywood, R. M. Haywood, 'Roman Africa,' in *Econ. Survey*, IV.
ILAf R. Cagnat, A. Merlin, L. Chatelain, *Inscriptions latines d'Afrique*, 1923.
ILAlg S. Gsell and H. G. Pflaum, *Inscriptions latines de l'Algérie*, 1922 and 1957.
ILM L. Chatelain, *Inscriptions latines du Maroc*, 1942.
ILS H. Dessau, *Inscriptiones latinae selectae*, 1892–1916.
ILTun A. Merlin, *Inscriptions latines de la Tunisie*, 1944.
IRT J. M. Reynolds and J. B. Ward Perkins, *Inscriptions of Roman Tripolitania*, 1952.
Leschi, L. Leschi, *Études d'Épigraphie, d'Archéologie, et d'Histoire africaines*, 1957.
Liebenam, W. Liebenam, *Städteverwaltung im römischen Kaiserreiche*, 1900.
NAM *Nouvelles Archives des Missions scientif. et archéol.*
PBSR *Papers of the British School at Rome.*
Poinssot, *Dougga*, C. Poinssot, *Les Ruines de Dougga*, 1958.
RE Pauly-Wissowa, *Real-Encyclopädie der Klassischen Altertumswissenschaft.*
Recueil, *Recueil des notices et des mémoires de la société Archéologique du Département de Constantine.*
Romanelli, *Storia*, P. Romanelli, *Storia delle Province Romane dell'Africa*, 1959.
Salama, P. Salama, *Les Voies romaines de l'Afrique du Nord*, 1951.
SEHRE[2] M. Rostovtzeff, *Social and Economic History of the Roman Empire*, 2nd ed., 2 vols., rev. P. M. Fraser, 1957.

In this survey I have attempted to collect all the building costs and other known outlays or charges that have survived from the cities of Roman Africa, omitting only those examples which are purely military and those which date from after the reign of Diocletian. The list is based primarily on an investigation of the published epigraphy of the area, though I have also been able to use five unpublished price-inscriptions.[1] None of the existing indices to the volumes of African inscriptions is comprehensive in their coverage of prices, and so it has been impossible to

[1] The main sources are *CIL* VIII (hereafter referred to as *C.*), *ILAlg* I and II, i, *ILAf*, *ILM*, *ILTun*, *IRT*, and *AE* from 1890 onwards.

I am deeply indebted to Professors A. H. M. Jones and G. Charles-Picard for comments and suggestions. I am also grateful to Mrs. D. W. Brogan and M. H.-G. Pflaum for their advice, and to M. Marcel Leglay of the Service des Antiquités de l'Algérie for kindly providing, and allowing me to reproduce, three unpublished price-

check whether the list includes all known examples; but it is unlikely that there are large omissions. The provinces from which the material is drawn are as follows: Africa Proconsularis, Numidia (which became an independent province in 197–198 A.D.[2]) and the Mauretanias, Caesariensis and Tingitana. When giving the locality of cities in the province of Proconsularis, I have followed the Diocletianic divisions (Zeugitana, Byzacena, Tripolitania and Numidia Proconsularis) for the sake of closer definition.

The only comprehensive list of African price material that has previously been published is that of Mme. Bourgarel-Musso.[3] This includes most of the examples that had appeared up to 1934, but it is now in need of supplementation. I have thought it worthwhile to make a completely new list, including all available material, for two reasons: the earlier compilation appeared in a periodical that is not widely accessible, and so a list of addenda and corrigenda would be of very limited value by itself. Secondly, the earlier tables, although valuable as a basic collection of references, are of variable accuracy, and are in some respects misleadingly arranged.[4]

Part I (pp. 50–65) contains a discussion of the main features of the price material. Under 'Provenances' (pp. 56–61) I have given individual summaries of the prices from the most important cities, because the list itself is not arranged geographically and is too long for the reader to extract the material from a particular city with any ease. In Part II, I have examined three subjects in more detail: the summae honorariae, private fortunes, and the implications of foundation gifts about the size of ordos and curiae at certain cities. (I have given here an account of all the evidence for African ordo-totals that I have been able to find from any source, since no account of this subject has previously been published.) I have included the following statistical adjuncts: a list of the sacerdotes provinciae Africae before Diocletian (see p. 52); a tabulation of the dated prices (Table I, p. 76); a table showing the rate of public building from private funds between Trajan and Gordian III (Table II, p. 77); a summary of the debasements of the silver coinage from Trajan to Septimius Severus (Table III, p. 78); and a tabulation of the geographical distribution of African prices (Table IV, p. 78).

inscriptions from Cuicul (given in note 114, p. 109). I am indebted for further information to Dr. J. Morris and Mr. M. H. Ballance.

[2] H.-G. Pflaum, *Libya*, 1957, p. 75.

[3] 'Recherches économiques sur l'Afrique romaine,' *Revue africaine*, lxxv, 1934, pp. 491–520, with preceding discussion, pp. 354–414.

[4] I have added one hundred new entries, together with some inferences about foundations whose financial details are incomplete; some prices have been listed here under headings different from those under which they appear in Bourgarel-Musso's list; sixteen of the entries in the earlier collection have been discarded because they are doubtful as prices; and it has been necessary to give different readings to more than 100 of the particulars of the inscriptions summarised by Bourgarel-Musso, though the present article cannot of course claim undeviating accuracy. But I am indebted to her lists for some references to price-inscriptions which appeared in the earlier part of this century. I have arranged the prices in each category in descending order throughout, in order to show clearly the range which they cover. I have given references to the main archaeological accounts of buildings whose remains survive, in the footnotes to the list of buildings (nos. 1–76 in the list; also 221 and 400). I have not reproduced the Zarai customs-tariff (discussed below, pp. 74–75), nor the benefits of the military colleges at Lambaesis (see note 30), neither exemplifies ordinary current prices or expenditures in the cities of Africa.

PART I

Introduction

The African price-inscriptions form the largest single collection of specified gifts that has survived from any one of the western provinces of the Roman Empire, and they probably constitute an absolute majority of the inscriptions of this type that have survived from the Latin West as ■ whole.[5] They are largely confined to what was, until the reform of Septimius, the single province of Africa Proconsularis (the only important material from Mauretania is a foundation gift, and the price of a large temple).[6] These inscriptions are useful in that they offer the most detailed information that has survived about the civic donations which were ■ constant feature of the activities of the urban upper class in many provinces under the principate. The area from which they come is one in which munificence was, as far as we can judge, particularly strong. The price material includes a number of figures for the distributions, feasts and entertainments which had become an habitual accompaniment to the dedication of monumental gifts in many African cities by the end of the second century A.D., as well as large numbers of prices for monuments themselves. The prices have a further value for the student of Roman Africa as offering a guide to characteristics of the cities from which they come. They also provide some basis for comparisons of African price-levels with those in other provinces,[7] as well ■ giving information about Roman building-costs.[8]

The usual source of prices from Roman Africa, a few literary references apart, is the occasional inscription in which the donor of a monument or perpetual foundation chose to record its value, and sometimes also the value of any other payments that he had made to the city. The motive behind such declarations was perhaps originally the wish to impress the literate passer-by, but the gesture once made was not always carried ■ a logical conclusion; for numbers of African inscriptions record only the amount of the outlay first promised, without specifying the sum that was eventually spent. This was not a local peculiarity, however, for an instance of the same practice is found in a distinguished context at Ostia: *CIL* XIV, 98, specifies the sum that Hadrian had promised for the building of the baths of Neptune, but not the amount by which Antoninus Pius, who fulfilled the promise, enlarged the financing. At the African cities where it is abundant, epigraphic mention of prices seems to be a simple extension of the thoroughness which often characterised the Roman public inscription, rather than the cheaply flamboyant gesture which we should think it if the practice were revived today.

[5] Short of an attempt to list all prices known from the remaining western provinces, it is difficult ■ show the evidence for this difference. But the paucity of prices in the indices to the relevant volumes of *CIL* offers some indication, ■ though these indices are usually incomplete in their listing of prices. (See *CIL* II, III, V, VII, IX, X, XI, XII, XIII, XIV.) The number listed in the indices to these volumes is certainly less than the 420 odd which survive from Africa, although the total population of the other western provinces put together must have greatly outnumbered that of Africa.

[6] Nos. ■ and 258 of the price-list.

[7] See p. 65 below.

[8] See forthcoming article by present author ■ African construction costs.

But there was probably also an element of individual pride behind the ancient usage, for the prices were largely confined to monuments or gifts provided by private generosity, and the number which are stated in communal dedications in Africa is very small.[9] We do not find that it was only the most remarkable monuments whose prices were revealed, or even that there was a greater tendency to specify the amount of large expenditures than of small ones. Local custom evidently played a considerable part in determining epigraphic mention of the amount of small outlays; for at the Numidian cities of Thamugadi and Cuicul there are substantial numbers of statue-prices (see below, pp. 83–89), which include some of the lowest prices that are known, as well as some of the highest prices; while at Thugga and Sufetula, two cities of Proconsularis from which large numbers of statue-bases have likewise survived, there are no extant mentions of the prices of ordinary statues, although a number of larger outlays were specified at Thugga. This implies that there were inhibitions against specifying the value of small monumental outlays in some cities of Proconsularis. But since Proconsularis, as distinct from Numidia, was the first part of Africa to be colonised by Rome, and was settled more thoroughly than any of the subsequent accessions, it is not surprising that its cities should have been the closest in their approximation to the practices of Italy, where statue-prices were very rarely stated.

Although the price-inscriptions are a small part of surviving African epigraphy, they are abundant enough to show that the custom of specifying the value of donations was generally more common here than in the other western provinces. Their number, and the often unremarkable size of the outlays revealed, suggest a certain lack of restraint among Africans as compared with other provincials; but, as has often been remarked, the Romanisation of Africa, extensive though it was, resulted in something which was never purely Roman.[10] The prices also, however, reflect the vigour with which the custom of private generosity towards the community flourished in Africa at a time, namely the later second and early third centuries A.D., when munificence in the cities in other parts of the Empire was no longer at its height.

The great majority of the African donations were made directly in honour of local magisterial or sacerdotal office, and of the 272 gifts included in the present list, only 44, or about one-sixth, are testamentary.[11] We can give a rough estimate of the proportion of Latin African inscriptions as a whole that has survived from the pre-Diocletianic period, from the number that mention the holders of the *sacerdotium provinciae Africae*, the priesthood of the imperial cult of Proconsularis, held annually by one man. It is fair to assume that each holder of this office during the period of plentiful building from Trajan to Gordian III would have been commemorated by at least one statue in his native town, since the distinction was a considerable one in a province as rich in towns as Africa Proconsularis. (One of the surviving sacerdotes appears in four inscriptions at three different towns:

[9] Nos. 6, 20, 30, 31, and 200 give the amounts of expenditures by cities.

[10] Broughton, p. 228.

[11] Five of the legacies in the present list were administered by the city (a feature indicated thus ***): nos. 1, 5, 38, 63, 67. The remaining 39 were administered by heirs (indicated in the list by a single asterisk *): nos. 4, 6a, 11, 15, 32, 36, 41, 54, 77, 82, 95, 101, 104, 105, 137, 154, 177, 180, 196, 248, 249, 251, 252, 254, 258, 259, 261, 262, 263, 265, 342, 343, 344, 390, 9, 79, 97, 109

P. Iulius Liberalis of Thamugadi.[12]) Thirteen priests are known from inscriptions in the period before Diocletian; all of these should probably be assigned to the period between the accession of Trajan and the death of Gordian III, during which 146 priests would have held office, unless there were hidden irregularities.[13] This suggests a rate of statue-inscription survival below 9 per cent., even though African inscriptions have perhaps survived better than those of any other western province, save Italy.

Dating and chronology

(i) Most of the inscriptions included in the present survey almost certainly belong to the period of just under a century and a half between the accession of Trajan and the death of Gordian III, though less than a quarter are specifically dated. The concentrations of dated African inscriptions as a whole outside this

[12] Thamugadi, *C.* 2343, *BCH*, p. 318; Cuicul, *AE* 1914, 41; Verecunda, *C.* 4252.

[13] The usual title of the priest of the imperial cult of Africa Proconsularis was, from the early second century onwards, *sacerdos provinciae Africae*, but two references have also survived from the beginning of the century to a *flamen Aug. provinciae Africae*. It is clear from the close resemblance of phraseology between the earliest of the *sacerdos* texts (*C.* 14611) and the more explicit of the two *flamen* texts (*ILAf* 458+ the unpublished left-hand section of this inscription, seen by myself in the Memmian baths at Bulla Regia) that the office referred to was in both cases the provincial priesthood. From the sequence of the inscriptions as a whole, with two *flamines* both of whom are approximately Trajanic, against a series of eleven pre-Diocletianic *sacerdotes* which stretches through the second and into the third century A.D., it is virtually certain that *flamen Aug.* was an earlier title, which gave way to the title *sacerdos*. The two inscriptions mentioned are dated to adjoining years: the Simitthus text (*C.* 14611) shows a '*sacerdos* . . . anni XXXVIIII' (a. 109/11, dated from *C.* 12039+ 12030); while the unpublished section of the Bulla text shows a '*flamen Aug.* . . . anni XXXX' (a. 110/112). This indicates that the title *flam. Aug.* was still in use at the latter date; from the apparently earlier occurrence of a *sacerdos* we should probably infer that the Simitthus text was engraved after the Bulla inscription (although it refers to a tenure of office one year earlier than that mentioned at Bulla), and that the wording was retrospectively altered to *sacerdos* to conform with the change in titulature which had by [illegible] taken place. This official change must therefore have been made within the lifetime of a man who had been of sufficient eminence to hold the highest office in the province in 109/11.

The change in titulature is also recognised in A. L. Abaecherli's 'The Institution of the Imperial Cult in the Western Provinces,' *Studi e Materiali di Storia delle Religioni*, 1935, pp. 153–186. Her suggestion that dating by the year of the provincial priesthood began in Africa under Caligula, and not under Vespasian as is commonly supposed, can be refuted from the evidence that is now available. The Bulla and Simitthus texts cited above show that the title *flamen Aug.* lapsed very soon after 'annus XXXX'; while one of the Cuicul inscriptions (*AE* 1949, 40) shows that the title was nonetheless still in existence after the foundation of that city by Nerva. These co-ordinates will not allow 'annus I' to be placed as far back as the reign of Caligula. It seems safe to follow the *CIL* editors in thinking that the Furnos inscriptions (*C.* 12039, 12030) establish 'annus CXIII' between 183/185, and so place 'annus I' in the years A.D. 70/72.

The title of the priesthood of the imperial cult in Sardinia also underwent a change of this kind, though the date has not been [illegible]d: the earlier title was '*flamen divorum Augustorum*,' which seems to have given way at [illegible] time before the mid-third century to '*sacerdos provinciae Sardiniae*' (*RE* IV, 812, 7).

The following inscriptions mention flamines or sacerdotes of the province of Africa before Diocletian. (The list is based on the indices to *CIL* VIII, *ILAlg* I, *ILAf*, *ILM*, *ILTun*, *IRT*, and the Tables générales of *AE*.) ZEUGITANA: Simitthus, *C.* 14611; (Ghardimaou), *C.* 14731; Utica, *C.* 25385; Bulla Regia, *ILAf* 458 (*flamen*). BYZACENA: Ammaedara, *C.* 11546; Furnos Maius, *C.* 12039; Althiburos, *C.* 16472; Mactar, *Atti del III Cong. Int. di epigrafia*, 1959, pp. 265–6. TRIPOLITANIA: Gigthis, *ILTun* 36; Lepcis Magna, *IRT* 397. NUMIDIA PROCONS.: Thubursicu Numidarum, *ILAlg* I, 1295. NUMIDIA: Cuicul, *AE* 1949, 40 (*flamen*); Cuicul, *AE* 1916, 13; Thamugadi (Thysdrus?), *C.* 2343, 4252, *AE* 1914, 41, *BCH*, p. 318. (Further inscriptions show a '*flamen (Aug.) provinciae (Africae)*' probably of the late first century and so lying outside the period of the sample, *ILAlg* II, i, 71 and 36, Rusicade; and a *sacerdos provinciae* of the time of Julian, *ILAlg* I, 253, Calama. It is known from literary sources that Apuleius held the *sacerdotium provinciae*, probably under Marcus, St. Aug., *Ep.* 138, 19 and Apul., *Flor.* 16).

Lists of the known provincial *sacerdotes* of the Three Gauls and the provincial *flamines* of Narbonensis are given by J. A. O. Larsen, *Representative Government in Greek and Roman history*, 1955, pp. 226–227, n. 17–18.

period are relatively small, apart from fourth-century inscriptions, most of which are easily recognised as such. In terms of the average per year the number of African inscriptions that has survived from the first century A.D. is almost negligible, compared with the number from the second century.[14] Only Lepcis Magna, which was already a city of great wealth under the late Republic,[15] shows any substantial concentration of building activity in the first century.[16] In the reign of Trajan we find fourteen dated public buildings from Africa as a whole; amongst these are six whose financing was certainly private; and forty imperial dedications from this reign (mainly of statues) are listed in *CIL* VIII.[17] The number of privately financed public buildings erected annually (on reign-average) then increased from Trajan to Caracalla almost without a break, as far as the emperor-dated inscriptions indicate. Their evidence is collected in Table II (p. 77).

The beginning of the third century 'cessation' of African building is assigned to A.D. 235 by Haywood and Charles-Picard[18]; but *CIL* VIII (*loc. cit.*) contains thirty-eight non-miliarian imperial dedications under the third Gordian, which is actually a higher concentration per year than the fifty-seven which are found under Severus Alexander: the Gordianic rate is approximately 6·6 per year against the earlier 5·3. After the death of Gordian in 244, however, the change becomes undoubted and there are now very few dated African inscriptions in any reign until the time of the Tetrarchy. (The most prolific intermediate period, on the evidence of *CIL* VIII, is that of Valerian, Gallienus, Claudius and Aurelian, with an overall average of about 2·8 imperial dedications per year.)

(ii) The dated African prices have been set out in Table I (p. 76) taking each reign as a chronological unit (a procedure made necessary by the vagueness of some of the dating indications). The first section consists of building outlays and other large expenditures (Table I, Section A, p. 76), and the second contains statue prices (Table I, Section B, p. 77). Neither of these sequences can be regarded as a guide to chronological fluctuations in the cost of living or even to fluctuations in construction prices; they can only suggest differences in the amounts of the outlays being made at different dates. For without archaeological correlations, of which there are very few among the dated prices, we cannot determine whether an increase in amounts from one reign to the next represents a rise in prices, or is merely the result of expenditure on a more generous scale in the latter reign. It is also a defect of such a small sample from the epigraphy of a large area that the nature of the few examples which survive from each reign will be influenced by the character of the places from which they happen to come. If the centres that provide the inscriptions of a given reign are all sizeable, the result may be an apparently impressive range of prices for that reign, regardless of whether this was a period of exceptional munificence or prosperity, while a reign-sample which is predominantly 'small town' may have similar effects in the

[14] This can be seen from the lists of buildings in Romanelli, *Storia* and *CIL* VIII, supp. 5, fasc. ii, 'Imperatores.'

[15] Caesar, *Bell. Afr.*, 97, 1.

[16] *IRT*, p. 252, including nos. 3 and 7 of present survey.

[17] Supp. 5, fasc. ii, 'Imperatores.'

[18] Haywood, p. 114, and Charles-Picard, *Civilisation*, p. 102.

opposite direction. The regional factor is too indefinite to allow practical compensations to be made, but it may clearly have a large influence upon tables where the sample units are too small to cover a representative cross-section of communities in every case. This is especially true of Section A, where material is sparse and outlays vary widely. It may be noted that the reign of Septimius in this section contains no examples from really large cities, and three from minor ones (nos. 13, 23, 24). But the provenances in other parts of this sequence are on the whole more heterogeneous, though it is dominated by material from Thugga, which provides a quarter of the examples (see note 34).

There is little indication here that there was a rise in the value of expenditures in the reigns when private building dedications apparently reached their highest frequency, those of Commodus, Septimius and Caracalla (see Table II, p. 77). Even the two very large gifts recorded under Commodus and Caracalla (HS1 million+ and HS696,000+) hardly outstrip those found in the two previous reigns, HS1,300,000 under Marcus, and HS500,000 under Antoninus Pius. Nor is there any convincing suggestion of a trend towards higher outlays on gifts at any point in the period, except in the reign of Hadrian. Since inflation was increasing to some extent throughout the period, due to debasements of the currency (Table III, p. 78), this may imply a gradual decline in the real value of gifts.

It is curious that the surviving prices from the reign of Gallienus (260–267) do not in themselves show any marked advance upon earlier amounts, nor a marked decline from them; for it is almost certain that in the Empire at large prices must have risen enormously by the 260's, through the immense increase in the amount of coin in circulation which had taken place without a corresponding rise in production; while public building in most parts of the Empire had almost ceased by this date. The export-trade in corn and olive-oil[89] would probably have kept currency, in the African ports at least, more or less in line with that of Italy; while Lambaesis, the base of the legion in Africa, must have been in effect a centre through which coin direct from the military aerarium was diffused in Numidia (see pp. 58–59). But all four of the surviving African Gallienic prices come from towns set well inland which were also remote from Lambaesis, and which would therefore have been slow to feel the effects of changes in the currency stemming from abroad.[90] There are very few indications of large-scale commercial contacts between small inland cities and the ports. It seems possible that at towns such as these, prices in the mid-third century may have been closer to second-century levels than they were in the empire as a whole, though it must be admitted that these four figures, without supporting archaeological evidence, do not decisively establish what the buying power of the currency was in Africa under Gallienus.

The statue prices (Table I, Section B, p. 77) provide a much bigger dated sample, but they are equally inconclusive in suggesting any overall movement in the level of outlays. The median averages from the reign of Antoninus Pius to that of Caracalla are all remarkably close, considering what fluctuation there is

[89] Charles-Picard, *Civilisation*, pp. 69–88.

[90] Abbir Cella, Thibursicum Bure, Thugga and Macomades; the last is little more than 90 km. from Lambaesis as the crow flies, but the distance by road was considerably more, and the town was an isolated one. (See 'Réseau routier de l'Afrique romaine' in Salama.)

in sample size from reign to reign (five under Commodus, twenty-two under Septimius). Statues of phenomenal expense occur under Hadrian (no. 83), Marcus (nos. 97, 101) and Septimius (nos. 96, 98; no. 82 is also probably Septimian).

Another guide to the chronology of African munificence is provided by the series of emperor-dated privately-financed buildings; analysis may be made here only in terms of frequency of dedication, not of size of gift, but the sample is wider and larger than the sample of dated large-scale gifts. The results are given in Table II, p. 77, where some similar statistics from the other western provinces are also given. These figures appear to suggest that there was more privately-financed building in Africa during our period than in the rest of the western provinces put together, but it is very unlikely that this was so: the non-African sample is an incomplete summary of the sources now available, and inscription survival is in any case probably better in Africa than anywhere else in the West, save for parts of Italy. But these figures do strongly suggest a downward trend in public building from private sources in the non-African provinces of the west from the reign of Trajan onwards, whereas the indications in Africa show a climb in the frequency of such building as far as Caracalla. In Asia Minor, the main eastern area from which evidence for building and munificence is abundant during the Principate, the peak of activity was the reign of Marcus Aurelius, and the decline under the Severi was less marked there than it was in the western provinces north of the Mediterranean.[81] The climacteric was still a third of a century earlier than that in Africa.[82]

There are certain dangers in assuming a close connection between fluctuations in private building and changes in the wealth of the area. Large-scale surplus spending must imply the prosperity of the class which is responsible. (Though as Charles-Picard points out,[83] the number of profitable alternative outlets for private capital in the Roman world was very limited; it is never possible to gauge how many years' unused surplus the value of a particular gift may represent.) But an increase in the frequency of munificence may be as much the result of the diffusion or the development of customs of public generosity as of any actual increase in personal resources. The extreme contrast between the number of surviving African statue dedications in the reign of Commodus, and the number under Septimius[84] must, if considered significant, be regarded more as manifestation of

[81] See Table II, p. 77.

[82] Broughton in *Econ. Survey*, IV, p. 794.

[83] In a valuable discussion of the implications of the amount of building and munificence in Africa, Charles-Picard, *Civilisation*, pp. 96–100. Some more detailed remarks are given by A. Lussana, 'Munificenza privata nell'Africa romana,' *Epigraphica*, 1952, pp. 100–113; but the statistics here consist only of approximate totals without references, and take no account of any of the five collections of African inscriptions published since *CIL* VIII.

Africans seem to have been remarkable among western provincials in their longevity as well as in their munificence. Burn finds a mean total life-expectation, from tombstones, of 48, at age 15, for men, and 44, at age 15, for women in Africa Proconsularis, against figures of 44/36, 40/33 and 40/37 in other western provinces. (A. R. Burn, 'Hic breve vivitur,' *Past and Present*, November 1953, pp. 2–31.) It might be tempting to link the prosperity of the African propertied class to this apparent demographic advantage; but it is difficult to see that variations in longevity of the degree shown could by themselves have been enough to have a critical effect either on the incidence of the 5 per cent. inheritance tax, or on the rate at which estates changed hands.

[84] In the index to *CIL* VIII (supp. 5, fasc. ii, 'Imperatores') 62 dedications to Commodus, against 262 to Septimius and members of his family during his lifetime, miliarii excluded. Most of these were statues, though not all were privately financed. It should be noted as a caveat that

enthusiasm for the first African emperor than as symptom of the arrival to affluence of a vast new bourgeoisie.[25] There are in fact indications that there were phases when munificence became fashionable in the Roman world under imperial encouragement, in the reigns of Augustus and Tiberius and again under Nerva and Trajan.[26] It may well be that the vast building works sponsored by Septimius Severus at his native Lepcis[27] provided much of the stimulus for the wave of building activity that began in the African provinces during his reign, although this was not sustained only by private benefactions.

Provenances

(A statistical summary of regional price distribution is given in Table IV, p. 77.)

Prices have survived from a wide range of African cities, including some of the most important. But despite remarkable features, the price material from the cities of greatest political importance, Carthage, Cirta, Hadrumetum, Hippo Regius and Lepcis Magna, is not (except in the case of Lepcis) generally such as to mark them out as the main centres. These were places of great size nevertheless, rivalled by very few other cities in Africa.[28] The highest surviving price for a building comes from Lambaesis (no. 1), not from any of the provincial capitals; while the other building prices in the highest range, above HS300,000, come, with the exception of one price from Lepcis (no. 63), from cities of secondary importance (nos. 27, Calama, 28, Madauros, 29, Thagura and 38, Thamugadi). But the general absence of the phenomenal amount where it might most be expected is no evidence that the grandeur of the administrative centres was on a par with that of the less distinguished towns. Instead, it mainly reflects the poverty of the epigraphy that has survived from most of the major towns, because of subsequent settlement, and the ravages of barbarian invader and Arab builder. The towns from which prices survive in bulk are mostly remote places whose sites have suffered little at the hands of later ages. The Lepcis examples cited below give some notion of the scale of outlay of which we should probably find mention if inscriptions had survived in the same numbers from Carthage, Hadrumetum, Hippo Regius and Utica.

CARTHAGE (properly 'Karthago'), by far the largest city in Africa, and second or third largest in the Empire, has left some considerable prices, though only two show the altogether exceptional scale that might be expected here: these are a summa honoraria for the quinquennalitas almost twice as high as any other African summa honoraria (no. 360), and a figure for amphitheatre games several times larger than any other surviving African games price (no. 281). There are

Commodus suffered *damnatio memoriae*, though the Septimian rehabilitation of his memory resulted in the restoration of his name on many monuments. It is also relevant that Septimius was head of a family: provincials could show their enthusiasm for his reign by erecting statues of Caracalla, Geta, Julia Domna and Plautianus as well as of the emperor himself, whereas Commodus had only one imperial associate, Crispina.

In terms of public buildings, as distinct from statues, erected from private sources, the Commodan evidence in fact has a higher year-density than that from the reign of Septimius (see Table II, p. 77). The increase in munificence under the first of the Severi appears to have been mainly confined to smaller gifts.

[25] Tacitus, *Ann.* III, 72; Pliny, *Ad Trajan.* 8.

[26] P. Romanelli, *Leptis Magna*, 1925.

[27] Charles-Picard, *Civilisation*, pp. 170–178.

eleven other figures or sets of figures from Carthage (nos. 40, 43, 324, 327, 328, 231, 401, 402, 423, 424, 425).

LEPCIS MAGNA, capital of Tripolitania under Diocletian, and possibly the second largest African city,[29] has left prices quite as impressive as those from Carthage, though the surviving public epigraphy here is, of course, much larger than that which survives from Carthage. The highest Lepcis figure, an outlay of one million sesterces for sixteen statues (no. 77), is exceeded in Africa only by the legacy for the alimentary scheme at Sicca (no. 248), though it is equalled at Oea (no. 249). The stage of the theatre at Lepcis, reconstructed under Antoninus, cost HS500,000; this is more than any other African building work proper whose value is known (save the Capitol at Lambaesis, no. 1). Remarkable though the figure is, considering that it covers only a small part of the theatre's construction, it is not a necessary indication of high construction costs at Lepcis; for the material (various Greek marbles) was imported, and the impressive three-tiered *scaena* was decorated with marble statues of a fineness rarely discovered elsewhere. A silver statue at Lepcis is the most expensive statue of any material known in Africa (no. 82). There are nine other prices from this city (nos. 3, 7, 41, 51, 56, 79, 212, 213, 411).

HADRUMETUM, the largest town of Byzacena and the seat of one of the two proconsular legates outside Carthage, has left very few inscriptions; a small quinquennial foundation is the only notable price (no. 264; also no. 242).

HIPPO REGIUS, the principal town of Numidia Proconsularis, and likewise the seat of a proconsular legate, has left record of the most costly statue after that at Lepcis (no. 83; also no. 84). There is also a Hippo foundation of some size, though it is ■ larger than others known at towns of smaller note (no. 252; *cf.* no. 251, Thisi, and no. 253, Thugga); and one summa honoraria (no. 363; 311 is a Hippo sportulae figure).

CIRTA, the capital of the Septimian province of Numidia, has left five summae honorariae, much the largest number that survive from any one city (nos. 345, 349, 357, 361, 379; see also no. 332 and the discussion of summae honorariae below, pp. 65–69). There are seven Cirtan construction prices (nos. 49, 50a, 102, 129, 247, 394, 398), a valuation of the bullion in the Capitol (no. 381), and three sportulae figures (nos. 294, 298, 304).

Four more cities which were probably of considerable size, though less important than those so far mentioned, provide notable prices or series of prices. OEA in Tripolitania has left a foundation of great size (no. 249, exceeded only by no. 248); two impressive figures for personal fortunes, a considerable outlay on sportulae (money-distributions), and a land price are also known here (nos. 383, 384, 306, 388).

THEVESTE in the south of Numidia Proconsularis has left twelve prices, which form the most varied range surviving from a single city: they consist of three foundations, one of which is the third largest known in Africa (no. 250; also nos. 257 and no. 268, the smallest African foundation); the price of a quadrifrontal arch

■ *Op. cit.*, p. 177.

which still stands (with the cost of two tetrastyles thrown in, no. 32), and a price for a temple (no. 11); a summa honoraria and ■ individual payment to the city (nos. 352 and 331); a substantial gift of gold and silver objects of specified weights (no. 382); and two statue prices (nos. 85 and 122). The arch, the largest foundation, and the bullion gift were the result of a single legacy, with a value of more than HS700,000, which forms the fourth largest African gift (nos. 32, 250, 382).

RUSICADE in Numidia, one of the three colonies linked to Cirta, has also left twelve prices. These include two very large payments to the city (nos. 325, 329) and four payments towards the cost of buildings, which suggest that joint financing was a custom here, though it is rare elsewhere (nos. 65, 69, 74, 75; but a subscription-built temple is also found at an obscure town in Zeugitana, no. 16). Two substantial prices for statues on tetrastyles, which are almost identical, are the only examples of this type that survive from Africa (nos. 93, 94). Rusicade also provides one of the higher prices for games, and its two summae honorariae supplement those from Cirta, with which they are identical in amount (nos. 284, 345a, 350; 391 is also from Rusicade).

LAMBAESIS, base of the legion in Africa from Trajan or Hadrian onwards, and perhaps second city of Numidia, has left the largest number of prices that survives from one city; there are forty-five in all,[80] but two-thirds of these are small-scale stele prices, whose levels are frequently uniform (see nos. 226–244). The figure for the cost of the Capitol is the fifth largest gift known in Africa, and the highest surviving building price (HS600,000, no. 1). The summa honoraria is the third highest known (no. 365, HS12,000, but equalled at Uchi Maius, no. 366). A phenomenal rate of sportulae is found here, HS100 ■ the flamines perpetui (no. 290, see below, p. 97). There are also construction prices, which include three figures for mausolea, one of which is the price of a surviving building (no. 221, and nos. 217, 222; other prices, nos. 68, 86, 132, 143, 146, 171, 194, 336, 365, 409).

Lambaesis must in effect have been a centre through which current coin-issues circulated in southern Numidia, since legionary pay came from the military aerarium at Rome. This area would thus have been more heavily exposed than most inland regions of Africa to the immediate effects of inflation caused by debasement of the currency, a process whose chronic stage began under the Severi (see Table III, p. 78); the 66 per cent. increase in legionary pay made by Septimius (from HS1,200 to HS2,000) would have added still further, in military zones such as this, to the inflation caused by the decline in the bullion content of the coinage. It is therefore not surprising that some very high prices from the Severan period are found at Lambaesis and at the three neighbouring towns from which price-material is abundant (Verecunda, Thamugadi and Diana Veteranorum): the price of the mausoleum of T. Flavius Maximus at Lambaesis, built probably not later than 237, was undoubtedly an extremely high one for ■ building of its size (no. 221 and note); the price of a fountain erected at Thamugadi under the Severi was also high (no. 52 and note; these buildings are discussed in more detail in a forthcoming article on African construction costs). Inference about statues, whose remains

[80] Apart from the provisions of the military colleges, for which see *ILS* 2354, 2445, 9097, 9100; *C.* 2554; *AE* 1899, 60.

practically never survive, is much less sure; but it is striking that half of the twelve African[31] statue-prices in the range above HS8,000 (see nos. 91–109) belong to statues erected under the first two Severi at the three cities in the environs of Lambaesis to which we have referred. For this is a concentration far higher than we should expect from merely random distribution, and it does not seem that any of these three towns was of sufficient importance for its status to explain abnormally high price-levels.[32] But the evidence is not entirely conclusive, since there are also Severan statue-prices of more normal levels at each of the three secondary towns, as well ■ at Lambaesis itself.[33]

Of the major cities whose prices have been discussed so far, six have left ten prices or more (Lambaesis 45, Cirta 17, Carthage 13, Lepcis Magna 13, Rusicade 12, Theveste 12). To these can be added six further cities, all probably of the second rank, each of which has likewise left ten or more prices (Thamugadi 24, Cuicul 24, Thugga 17, Verecunda 15, Diana Veteranorum 10, Madauros 10).

THAMUGADI and CUICUL, the African cities that are most fertile in prices after Lambaesis, are also Numidian. In both cases the bulk of the figures which have survived belong to statues (Thamugadi, nos. 78, 95, 98, 100, 105, 125, 150, 151, 160, 161, 179, 183, 207, 209; Cuicul, nos. 80, 81, 104, 112, 121, 126, 130, 141, 142, 162, 166, 167, 176, 189, 191, 192, 208). There are some building prices from both cities (Thamugadi, nos. 38, 52, 73, 407, 412; Cuicul, nos. 36, 50, 53, 245) and one summa honoraria from each (Thamugadi, no. 356; Cuicul, no. 355, both being low). From Thamugadi there are also three individual payments in honour of office, and a sportulae figure (nos. 330, 337, 339 and 312; also a Cuicul fragment, no. 410).

THUGGA in Zeugitana has provided the fullest surviving range of prices for buildings, a series running from Hadrian to Caracalla, five of which can be linked with archaeological remains (nos. 4, 5, 12, 15, 45; also nos. 8, 6a and 67, and fragments 400a, 405, 422).[34] There is a price for two colossi (no. 101), though there are no normal statue prices. There are three foundations of known amount (nos. 253, 260, 261), one individual payment to the city (no. 323, reign of Gallienus) and one building contribution (no. 63a, reign of Diocletian).

Most of the prices from VERECUNDA and DIANA, neighbouring cities in Numidia, are for statues (Verecunda, nos. 96, 109, 124, 136, 158, 163, 172, 173, 181,

[31] The twelve being nos. 95, 96, 97, 98, 100, 102, 104, 105, 106, 107, 108, and 109. The other statue prices in the range above HS8,000 are either late, or else are certainly of a size or elaboration which explains their cost without our supposing inflationary prices.

[32] See Broughton *passim*.

■ Nos. 143, 159, 160, 161, 172, 173, 178, 179, 194.

[34] The number of substantial specified gifts at Thugga (ten are of HS50,000 or more, nos. 4, 5, 6a, 8, 12, 45, 63a, 253, 323, 400) has led to the conclusion that "Thugga [was] perhaps the richest city of the proconsular province after Carthage' (Haywood, p. 112); while Cary, evidently building on this statement, names it as one of the four major centres of population in Roman Africa as a whole (*Geographic Background to Greek and Roman History*, 1949, p. 229). This cannot be accepted, for the relatively small area of Thugga's remains, comprehensive though these are, the unremarkable size of the public buildings, and the very late dates at which the main promotions in status were achieved (to municipium under Septimius and colony under Gallienus) all show that the town cannot have stood high among African cities. (See Poinssot, *Dougga*; the plan suggests a main area of about 20 hectares.) Thugga's surpassing wealth is a mirage created by a high ratio of private to public financing of municipal buildings, unusual consistency on the part of the benefactors in specifying the value of their gifts, and a phenomenally high rate of inscription-survival, which is purely fortuitous.

182, 184; Diana, nos. 107, 108, 131, 145, 159, 169, 177, 178, 193). There are summae honorariae for the flaminate from both cities, amounts which differ by a factor of five (Verecunda, HS2,000, no. 375; Diana, HS10,000, no. 367; but Diana was a very large city).[35] Also from Verecunda, nos. 310, 341, 416.

MADAUROS in Numidia Proconsularis, birthplace of Apuleius, has left ten prices, which include those of two important surviving buildings, the forum and portico, and the theatre (nos. 28 and 42; also nos. 14, 35, 120, 185, 216, 385, 386, 390).

Regarded in purely statistical terms, the twelve cities with more than ten prices each which we have considered (see p. 59) provide 213, or about half of the African prices. Out of these twelve, the seven Numidian cities provide 146 of the prices found in that province, which amount to 176 in all. In Proconsularis, by contrast, almost three-quarters of the total sample comes from cities which are sparsely represented in the price-list (having less than ten prices each): a further 171 can be added to the 64 figures from the five Proconsularis cities with ten or more prices (see Table IV below).

About half of the African prices come from cities not so far mentioned, each of which has left fewer than ten examples. These are mainly in Proconsularis, and especially Zeugitana, where the concentration of cities was higher than anywhere else in Africa. Some of the communities that furnish a handful of prices must have been very small, though there are also such cities as BULLA REGIA (354, 363a, 419), NEAPOLIS (342), THUBURBO MAIUS (90, 154, 301, 302, 308, 335, 364, 395, 396), UCHI MAIUS (103, 157, 265, 280, 287, 366), UTHINA (254), UTICA (399), MACTAR (255), SABRATHA (97, 321, 378, 404), CALAMA (2, 27, 54, 119, 128, 137, 413), and THUBURSICU NUMIDARUM (33, 155, 156, 346, 353, 370).

Some categories of price show regional concentrations which differ from what the geographical pattern of urban density would lead us to expect. Most notable in this respect are the foundations. Foundation-inscriptions by their nature almost always mention [redacted] of money if they are complete, and so their geographical distribution is more significant than that of, say, building prices, whose incidence is a random function within the pattern of 'private' building distribution, depending upon the taste of the donor. At least ten foundations which lack financial details can be added to the twenty-two that appear in the price list.[36] Of these thirty-two, twenty-nine come from Proconsularis, including Numidia Proconsularis, two from Numidia proper, and one from Mauretania Caesariensis. That there should only be one Mauretanian example is not surprising, for the inscriptions of this area are very deficient in prices in general, but it is notable, in view of the very high rate of inscription-yield from Numidia as compared with elsewhere, that there should be only two foundations from this province.

[35] *AAA*, fe. 27, 62.

[36] *C.* 26281, Uchi Maius; *C.* 26458, *Thugga; *ILAf* 527, *Thugga; *C.* 22856, *Thysdrus; *C.* 22904, *Leptis Minor; *C.* 22721, Gigthis; *IRT* 140, Sabratha; *Libya*, 1954, p. 394, Hippo Regius; *C.* 8284, *Lambaesis; *AE* 1905, 85, Macomades. The asterisk (*) denotes a testamentary gift.

The list of unpriced foundations may be an incomplete account of surviving examples, for this is a class of inscription that does not figure fully in the indices to the collections of African inscriptions.

In contrast to the distribution of foundations there are categories of price amongst which Numidian examples are much more numerous than the relatively low density of cities in this province would lead us to anticipate.[37] Almost half of the statue-prices (nos. 91–212) are Numidian, while Numidia provides a clear majority of the prices for mausolea and funerary stelai (nos. 213–244). The Numidian proportion of the payments to cities and summae honorariae (nos. 321–341, 345a–379) is also well above expectation (twenty-one out of sixty). This concentration has no economic significance as far as I can judge; it indicates only a relatively high frequency of price-mention in Numidia, from many of whose cities the proportion of inscriptions which survive is also unusually high.

Price-levels

Prices Section (i). The largest important series of prices in the list, those for buildings, are evenly spread over the price-range covered. The majority of the prices for complete buildings (nos. 1–62) are below HS100,000, as can be seen from this summary:

HS600,000–200,000+	10	examples
200,000–100,000	14	„
80,000– 50,000+	9	„
50,000– 20,000	17	„
14,000– 3,000+	13	„

Some fragmentary prices may also refer to buildings (nos. 398–425). When the lowest range is reached it is often likely that any unspecified increase upon the amount first promised will be large. An inscription from Gigthis in Tripolitania (no. 18) provides the classic example of a small original promise with an enormous increase: HS6,000 was promised here as the fund for building a temple whose eventual cost was HS21,000.

These figures sometimes reveal the cost of buildings whose size is known from existing remains (see footnotes to nos. 1, 3, 4, 5, 6, 12, 15, 16, 17, 18, 21, 26, 27, 28, 32, 38, 42, 45, 52, 53; also nos. 63 and 221). In the case of the theatre at Calama in Numidia Proconsularis (no. 27), archaeological remains are important for the interpretation of the price. The main inscription connected with this building commemorates the promise of funds of HS400,000 (by a woman flamen of the city, Annia Aelia Restituta) with which it was to be built. It has been assumed that this figure represents the cost of the theatre, but, as we [redacted] from the Gigthis example, the final cost of a building could be considerably larger than the sum first promised. The one complete African theatre price (no. 28) strongly suggests that HS400,000 would have been far too small a sum to provide a building the size of the theatre whose remains are known at Calama.[38] To argue from two dimensions only (the difference is too striking for greater accuracy to be needed), the area of the theatre at Madauros is 900 sq. m. approximately, and its price HS375,000; the area of the Calama theatre is approximately 2,750 sq. m., or more than three times as large,

[37] Salama, *op. cit.*, 'Réseau routier de l'Afrique romaine.'

[38] Calama theatre, Gsell, *Monuments* I, p. 102; Madauros theatre, Gsell/Joly, *Khamissa, Mdaourouch, Announa*, 1914, 'Mdaourouch,' pp. 80–89.

though the figure connected with it is only one-fifteenth larger than the actual cost at Madauros. It has been pointed out that the theatre at Madauros was wastefully built, no advantage being taken of natural contours to provide foundations for the slope of the *cavea*.[39] But an extravagance of this kind would hardly have sufficed to lead to ■ cost in the same class as that for theatres several times larger. Nor ▬ a difference in the buying power of the currency explain the closeness of the figures, for it is unlikely that there was any great gap between the dates of construction.[40] Hence the final cost of the Calama theatre was probably much more than HS400,000.[41] (But it is not likely to have been anything approaching the HS10 million said to have been spent on an unfinished theatre at Nicaea in Bithynia under Trajan.[42])

Prices Section (ii). Prices for statues are more closely concentrated than those for buildings. The distribution from HS8,000 to HS2,000 can be summarised thus:

9 at 8,000
3 at 7,000 and 7,000 odd (+1 with unspecified increase)
13 at 6,000 and 6,000 odd (+1 ■ ,, ,,)
18 at 5,000 and 5,000 odd (+3 ,, ,, ,,)
16 at 4,000 and 4,000 odd (+8 ,, ,, ,,)
13 at 3,000 and 3,000 odd (+2 ,, ,, ,,)
■ at 2,000 and 2,000 odd (+4 ,, ,, ,,)

This suggests a broad modal average between 4,000 and 6,000 odd sesterces, for the statue prices within this range amount to just under half of the overall total; the highest individual concentrations are at HS4,000 and HS5,000.

Prices Section (iii). Mausoleum prices cover a wide range; but five of the thirteen examples lie between HS32,000 and HS24,000. Stelai show some standardisation, chiefly at Lambaesis, at levels of HS2,000 and HS1,000. The funeral allowance to the heirs of a deceased member of the military college of cornicines at Lambaesis was HS2,000.[43]

Prices Section (iv). There are twenty-two African prices for foundations, sums of money laid down in perpetuity by an individual donor to yield interest for entertainments, distributions or charitable purposes. The only interest rate mentioned in African foundations of any size is 5 per cent. per annum.[44] The

[39] Gsell/Joly, *op. cit.*

[40] The Calama theatre was promised either under Marcus and Verus or under Septimius and Caracalla, while the Madauros theatre is dated to the early C. III by Gsell/Joly, *op. cit.*

[41] This has some general interest, for a number of other cities are known to have had theatres of roughly the same size as the building at Calama, whose width (in the ▬ place ■ the *scaenae frons*) measures 58 m.; the same dimension at Cuicul is 62 m.; at Thamugadi 63m60; at Thuburticu Numidarum 56m80; and at Thugga 63m50 (Gsell/Joly, *op. cit.*, 'Khamissa,' p. 99).

[42] Pliny, *Ad Traian.*, 39.

[43] *ILS* 2354. I am indebted for this reference to Mme. Bourgarel-Musso's article. HS2,000 appears to be a standard burial charge of long standing, as it is also found in an inscription from Pompeii (*ILS* 6366, 'decuriones . . . HS (2,000) in funere . . . censuerunt'). This sum is also found as a standard charge per day for games (see note 146), and as a common summa honoraria (see p. 69).

[44] 5 per cent. ■ mentioned as the rate of interest in nos. 248 and 258, and is implicit in the provisions of no. 262 (see Appendix, p. 114). It is also the rate suggested by the terms of no. 250, where 5 per cent. produces the price of HS195 per day for oil-distributions, with the extremely small surplus of HS20 annually. The interest-rates of 6 and 12 per cent. are found once each in Africa, but both the foundations concerned are extremely small (nos. 267 and 268).

largest of the foundations whose financial details are known provided for the support of 600 children, 300 of either sex (no. 248). The second and third largest foundations also provided popular benefits of a sort, one in the form of games and sportulae (distributions of money) to the citizens of the town (no. 249), the other in the form of oil-distributions to 'the people' in the baths (no. 250). A number of other foundations provided games or oil on a much smaller scale, but the most frequent beneficiaries were those who were already privileged, the decurions, who were given sportulae, and the curiales, for whom feasts were provided. (An estimate of the size of the curiae is given below under 'Constitutional conclusions,' pp. 73–74.) The occasions provided for in the foundations varied in frequency from once every seven years (no. 262, Abthugni) to sixty-four days each year, or more than once a week on average (no. 250, Theveste), though the usual custom was a single annual celebration. It may be noted that a higher proportion of foundations than of any other type of gift are testamentary (a feature indicated in the present list by a single asterisk *) : half of the priced examples are bequests. At least ten more foundations, which lack prices, are known in Africa, and half of these also were certainly testamentary gifts.[45]

Rates of sportulae are well evidenced (nos. 290–305). Their variety is considerable, but the most frequent rate is one denarius (HS4) per man, this being found in five, or one-third of the fifteen explicit examples. This sum was more than a day's wage for a legionary soldier between the reforms of Domitian and Commodus (when pay was HS1,200 per year). The phenomenal sportula rate of HS100 per man is found in one inscription at Lambaesis (no. 290) (see note 147 below). Five denarii per head is found three times; two denarii and half a denarius (HS2) are both twice explicitly mentioned. The higher levels seem to be rates for the privileged; for the three examples where a figure for distributions to the citizens at large is specified range from HS4 to HS1 per head (nos. 298, 304, 305). But sportulae were usually the perquisite of the decurions, and the most habitual popular donation, apart from indiscriminate celebrations of games, was 'gymnasium' or oil (see no. 320), for which no individual prices survive from Africa (but see note 151).

A number of collective prices for feasts for the curiae are known. These local fraternities existed in many of the African cities, the usual number per town being ten or eleven, as far as is known.[46] The prices show standardisation within the range HS240–300 per feast per curia, with only one significant exception, a figure of HS5,000 for a single non-recurrent feast for all the curiae (no. 271), probably indicating an allowance of HS500 per curia. It is curious that this should come from a town in Zeugitana of unknown name and few inscriptions (Zawiet el-Laâla), whereas a number of the lower feast prices come from places of some note, which include Theveste and Uthina (nos. 277, 272). But this deviation may have been the result of temporarily high food-prices, for corn-shortages were certainly known in Africa.[47]

[45] See note 36, where an asterisk denotes bequests. A. Lussana points out that foundations were also very commonly testamentary gifts in other western provinces, 'Contributo agli studi sulla munificenza privata,' *Epigraphica*, 1956, p. 85, n. 1.

[46] nos. 270–280 and pp. 73–74 below.

[47] See n. 159 below.

Games prices, of which there are few, show startling variations: from a price per day for ▬ amphitheatre show with gladiators and panthers at Carthage of HS50,000 and more, to a figure for circus-races at Auzia in Mauretania, probably a century or so later, of HS540 (nos. 281 and 287; nos. 288 and 289 are probably lower still, but cannot be calculated exactly).

Prices Section (v). The summae honorariae or fixed charges for civic office, of which the forty or so African examples are the only sizeable collection that survives from any one province, raise ▪ number of issues outside the scope of price-levels, and are discussed in detail below (pp. 65–69).

There are two African land prices, the earlier of which is merely a curiosity (no. 387). The other may well apply to typical agricultural land, though the area to which it refers can only be guessed at. (HS60,000 for Apuleius's 'exiguum heredioium' in the territory of Oea, no. 388.) But this figure is useful in that it provides a yard-stick from the world of everyday commercial transactions by which to measure the importance of the benefactions that form the bulk of the outlays that survive from Africa. It shows that the majority of the foundations, a substantial number of the buildings, and almost all the statues whose prices are known in Africa, would have been worth comparatively little in terms of land. The price comes from a context in the *Apology* where it was to the advantage of Apuleius to minimise the importance of this estate, but the figure must have been such as to add conviction to his assertion that the estate was small, though it should of course be remembered that Apuleius moved in millionaire circles and so his standards of size would have been quite high.

The value of the currency

Although no equation between modern and ancient currency can be certain in its application, we might hope to find a rough approximation for use in assessing the mass of figures in Roman currency that has survived from Africa. In fact it seems impossible to do so; since exact equations between Roman and modern currency have been made so frequently, I have summarised below the argument against translations of this kind (see p. 75).

But in assessing the value of amounts in Roman currency there remains the method of internal comparison. The Sicca alimentary scheme (no. 248), which gives the cost of male infant subsistence ▬ HS120 per year, at ▪ large inland town in Proconsularis in the reign of Marcus, provides a useful yard-stick, and implies a corresponding adult cost in the region of HS200 per year. Thus the average statue costing HS4,000 or more would represent an outlay worth not much less than twenty years' subsistence at a low level, or more than three years' pay for the legionary, in the period from Domitian to Commodus. A small temple of respectable execution could be built for the price of four such statues (no. 18, while some temples cost even less than this, nos. 20–23). Some of the largest outlays, by contrast, equal or outstrip the property qualification for members of the equestrian order (HS400,000; see nos. 1, 27, 29, 38, 63, 32–250–382), while three gifts equal the senatorial property qualification of one million sesterces (nos. 248, 249, 77) (see also above, p. 58).

There is some information relevant to the decline in the purchasing power of the Roman currency within the period from which African prices are numerous (roughly from Trajan to Gordian III, see above, p. 52), in the figures for the debasement of the silver coinage (see Table III). Since only ninety, or just under a quarter of the African prices come from dated inscriptions, this can be put to little practical use here; but in any case the effects of debasement within this period can perhaps be exaggerated. The degree to which a debasement causes prices to rise depends critically both upon the proportion of the total coinage that is debased, and upon the amount by which the coin issue concerned increases the volume of coin in circulation, functions not accurately known here. There is no reason to believe that any of the emperors from Marcus to Caracalla individually debased more than a fraction of the silver currency, the staple of ordinary commerce; and prices up to the time of Caracalla, in so far as they were determined by debasement, probably rose at a much slower rate than the amount of each individual fall in the silver content suggests in itself. It may be noted that legionary pay remained constant (at HS1,200) from the reform of Domitian to the reform of Commodus, or during more than half of the period from which the African prices mainly come; while the dated examples in themselves show little trace of price-shifts (see Table I and pp. 54–5 above).

A systematic comparison of African price-levels, with those from other parts of the empire could be made only by considering two series of prices connected with archaeological remains, of which there are few outside Africa; but it is interesting to notice that the pattern of statue-prices in the other western provinces is very similar to that in Africa (as far as can be judged from a much smaller surviving sample). In both [illegible] there is a large concentration in the range from HS4,000 to HS6,000.[48] This suggests that prices for one product at least did not vary greatly throughout the western half of the empire.

PART II

The summae honorariae

The fixed charge payable by the holder of a civic office or priesthood was denoted in the African inscriptions as *summa honoraria*, or *summa legitima*. It seems generally to have been a matter of local custom or individual choice which of these terms was mentioned in the inscription, and there is no discernible distinction between the payments referred to as *honorariae* and those called *legitimae*. The amounts varied enormously from place to place.

[48] Of a sample of twenty-seven statue prices from provinces including Italy, Germany, Gaul and Spain, ranging from HS1,200 to 25,000, eleven belong to the range from HS6,000 to 4,000. (Most of these are included in the table of L. Friedländer, *Darstellungen aus der Sittengeschichte Roms*, 1910, t. iii, pp. 335–345.) Eleven out of twenty-seven is quite a close approximation to the proportion of these prices in the African statue-price sample, where they number almost half (see p. 62).

The present list both adds to and subtracts from the previous compendia of African summae honorariae.[49] Six examples have been added to those in the most recent list, that compiled by Haywood, which appeared in 1938 (nos. 356, 359, 362, 363a, 364, 378); but a number of items in all five of the existing lists seem misleading or valueless as information about summae honorariae, and have therefore been excluded from this category. Space is not sufficient to allow a catalogue of the arguments against the inscriptions omitted (see nos. 324–341 *passim*); but most of them mention no *fixed* payment for office. We find an instance in a Thamugadi inscription of the reign of Septimius,[50] which contains the words 'inlat. r(ei) p(ublicae) ob honorem auguratus hs $\overline{\text{xxi}}$ mil et cc n'; as it stands, the inscription does not state that this sum was the amount officially demanded of each holder of the augurate, which would need some phrase such as 'honoraria summa auguratus inlata.' In fact, the figure of HS21,200 is most implausible in itself if regarded as a fixed charge (all known African summae honorariae above HS3,000 being in thousands), while the amount is more than ten times higher than that of the one certain summa honoraria known at Thamugadi (no. 356, HS2,000), and exceeds even that at Cirta, the capital of the province (no. 345, etc.). A contemporary inscription, which speaks of '. . . auguratus . . . legitimam,'[51] shows that there was none the less a fixed charge for the augurate at Thamugadi at this date (the reign of Septimius); but this was probably close to the charge for the IIvirate (HS2,000), and was thus so small as to have been submerged in the first inscription by the generosity of the large payment actually made. In practice it seems impossible to accept any epigraphic mention of a payment for office which was made 'ob honorem' without being called 'honoraria' or 'legitima,' as evidence of a fixed charge, unless there are supporting indications from the same city; these are found in only two instances, as far as I have discovered (nos. 345a, 363a[52]).

The fixed charges for office were often in practice exceeded by magistrates who wished to shine in generosity to their city, though it is unlikely that there was a sliding scale whose demands varied with the wealth of the individual, as was once suggested.[53] There is still no explicit evidence for changes in the official rates of

[49] *DS*, 'Honoraria summa' (Cagnat); Liebenam, pp. 57–65; E. Ruggiero, *Diz. Epig.* III, pp. 951–952 (Campanile); Bourgarel-Musso, *op. cit.*; Haywood, pp. 76–78. The distinction between 'somme obbligatorie' denoted as 'honorariae' or 'legitimae,' and 'doni spontanei' appearing under such formulae as 'ob honorem pollicitus' and 'cum promisisset,' was remarked by O. Hirschfeld in one of the earliest discussions of the African summae honorariae, although it has since been often overlooked ('I Sacerdozi dei Municipii Romani nell'Africa,' *Ann. del Inst. di Corrisp. Arch.*, xxxviii, 1866, p. 62).

[50] *C.* 17837. No. 330 in present list.

[51] *AE* 1941, 49.

[52] In the case of the Cirtan confederacy inscriptions explicitly give HS20,000 as the fixed amount for the decurionate, the aedileship, the IIIvirate, and the quinquennalitas at Cirta, as well as for the aedileship at Rusicade (see nos. 345–361). When the same sum is twice given as payment for the decurionate at Rusicade, though without mention of legitima or honoraria, it seems nonetheless almost certain that the payment represents the fixed charge (no. 345a). At Bulla Regia the certain fixed charge of HS5,000 for the IIvirate (no. 354), makes it clear that the coeval payment of HS6,000 'ob honorem q(uin)q(uennalitatis) [illegible] mainly, if not entirely, [illegible] fulfilment of a fixed charge for that office (no. 363a).

[53] This suggestion appears in Schmidt's commentary on an inscription f[illegible] Zama Regia (*C.* 12018, [illegible]. 205 of present list). The crucial phrase is 'ob h[ono]rem flam(onii) ampliata HS $\overline{\text{iii}}$ mil taxatione statuas duas posuit. . . .' The 'taxatio' or assessment mentioned here probably applies not to an official payment for the flaminicate, as S. supposed, but to a first estimate of the cost of the statues (*cf.* similar phrasing in a Cuicul inscription (no. 53) '. . . [mac]ellum . . . quod pro honore fl(amonii) p(er)p(etui) e[x] HS xxx m.n. taxaverat . . .'). I would translate the central phrase as 'having increased the assessment of

the summae honorariae at any African city, despite two apparent indications to the contrary.

The first concerns the IIvirate at Thamugadi: two inscriptions referring to the 'legitima' for this office have been put forward by Gsell as evidence for a change in the fixed charge[54]; one (no. 356) gives an undoubted figure of HS2,000 ■ the legitima, while the other (no. 339) gives a figure of HS4,000 as 'legitimam pollicitationemve,' likewise for the IIvirate. But if the second figure is itself read as a fixed charge for the office, the phrase 'pollicitationemve' becomes superfluous. It must, in fact, denote the amount of an individual undertaking to pay a sum higher than the official charge, for the mere fulfilment of a standing magisterial obligation would not involve a promise. It thus provides no evidence of an increase in the official charge. Secondly, an apparent ambiguity over the charge for the flaminate at Lambaesis: a summa honoraria of HS12,000 for this office is clearly shown by *C.* 2711 (no. 365); another inscription[55] gives HS11,000 for the same office. But this figure occurs ■ the end of a line in a text which is partially corrupt (l. 8) and has not yet been satisfactorily elucidated. For the moment the figure for the summa honoraria can perhaps be restored as XII, or 12,000; if there is no possibility of a missing symbol, there remains a strong chance of ■ engraver's error.

The surviving amounts for summae honorariae range from sums at Carthage and Cirta (nos. 360, 361, etc.) that would have been sufficient to pay for a small temple (nos. 18 or 21 for example) to sums at Themetra, Muzuc and Sarra that would scarcely cover the cost of a very cheap statue (nos. 347, 349, 377; see nos. 208–212). In some cases there is a broad connection between the amount of the charge and the importance of the city to which it belongs: Carthage and Cirta appropriately have amounts considerably higher than any other towns that figure in the list; and the towns at which the level was low were not usually very large places, though Thamugadi, with a summa honoraria of only HS2,000, was sizeable.[56] It is difficult to generalise any further; for the summae honorariae at intermediate cities vary within wide extremes apparently regardless of relative size or political standing. The Lambaesis charge of HS12,000, the highest amount known after those at Carthage and Cirta, was equalled ■ Uchi Maius (nos. 365, 366, both inscriptions being Septimian) although Lambaesis was second city of the province of Numidia, whereas Uchi Maius was no more than a small secondary town. At Hippo Regius, the principal town of Numidia Proconsularis and seat of a proconsular legate, the charge for office was HS10,000, actually below that at Uchi (no. 365), although Hippo was probably three times larger in area.[57] It is impossible to see a consistent correlation between the levels of the surviving summae honorariae and the standing of the cities from which they come.

HS4,000 (for the statues),' HS2,000 being virtually a minimum statue price (see ■ 91–212).

S. also cites an inscription from Gasr Mezuar in Zeugitana (*C.* 14427): '. . . victorias duas quas C. Annedius Severus ob honorem decurionatus . . . filior(um) suor(um) taxatis legitim[is ampliatis pro]miserat. . . .' I follow Cagnat (*DS*, 'Honoraria summa,' p. 237, col. 1) in regarding the 'taxatio' here as applying ■ the office, not to the individual, and would translate the crux as '[having increased] the legitimate payments assessed (on the two decurionates).'

[54] *AAA* fe. 27, 255.

[55] *AE* 1914, 40.

[56] 50 hectares, C. Courtois, *Timgad, antique Thamugadi*, 1951, p. 19.

[57] The ■■■ of Uchi appears to have been little more than 20 hectares (excluding necropoleis). See 1:25,000 inset in *Notes et Documents* (de la Tunisie) II, 1908, p. 127. E. Marec (*Hippone la*

It has recently been suggested that the highest summae honorariae are generally to be found at coastal cities.[58] There are nine African towns with known summae honorariae of HS10,000 or more, which can be regarded as a comparatively high level. Only four of these are coastal, of which three are atypical: Carthage (no. 360) would have had a high summa honoraria, because of the wealth that the capital city was bound to attract, whether a port of not; Hippo Regius (no. 363) was also an administrative centre of importance; and Rusicade (nos. 345a, 350) probably derived the level of its summae honorariae from those of Cirta, the inland capital of the Septimian province of Numidia, with which it was bound in confederacy; for the known amounts are identical. Only the example at Sabratha (no. 378) can be regarded as perhaps being representative of the majority of the ports; the charge here was HS10,000, equalled at Ammaedara and Diana (nos. 362, 367), and exceeded at Cirta, Uchi Maius and Lambaesis (nos. 345a, etc., 366, 365), all five of which were inland towns. But in fact the evidence is hardly abundant enough to justify generalisation about the geographical distribution of the higher African summae honorariae, for most of the ports have left no evidence of their charges for office.

Charges for more than one office are explicitly known at only two cities, Cirta (whose charges seem to have prevailed also at Rusicade, a confederate city, nos. 345a, 350), and Thubursicu Numidarum; it remains uncertain how much differentiation there may have been in general between the sums demanded for the various offices and priesthoods at any one city. The Cirtan examples are uniform at HS20,000 for the 'secular' offices (nos. 345 decurionate, 349 aedileship, 357 IIIvirate, and 361 for the quinquennalitas) and the one figure that differs (HS10,000 for the pontificate in A.D. 139 or before) is earlier than the rest and may conceivably belong to a period when Cirtan summae honorariae in general were as low as HS10,000. At Thubursicu Numidarum in the early third century the charges for the decurionate and the aedileship were both HS4,000 (nos. 346 and 353), and the charge for the flaminate half as much again (HS6,000, no. 370). These amounts come from a single inscription and must have been in force concurrently. (*Cf.* also nos. 354 and 363a, Bulla Regia.)

A common level for the summa honoraria was HS4,000, found at five out of twenty-nine African towns (nos. 346 Thubursicu Numidarum, 352 Theveste, 355 Cuicul, 358 Hr. Debbik, 371 Sutunurca). There are also five instances of HS10,000, one of which may represent an early level at Cirta (no. 379; the others, 362 Ammaedara, 363 Hippo Regius, also perhaps an early level, 367 Diana, 378 Sabratha). HS2,000 is found at four towns; it is interesting that this was also the amount demanded from IIvirs and aediles as a contribution to the cost of games by the charter of the Caesarian colony at Urso in Spain, two or more centuries earlier.[59] In the African towns decurions, as well as magistrates, were probably liable to this payment (see nos. 345–348), but there is no indication in the surviving

royale, 1954, p. 43) estimates the size of Hippo as 60 hectares. It is perhaps possible that the Hippo summa honoraria of the time of Septimius (the date of the Uchi inscription) would have been higher than the figure that has actually survived, which comes from a Hadrianic inscription; but we cannot assume increases in the levels of summae honorariae during the course of the second century without actual evidence.

[58] Charles-Picard, *Civilisation*, p. 126.

[59] *ILS* 6087, caps. 70–71; see note 146.

part of the Lex Ursonensis that this was so at Urso; hence the income derived from the payment may have been much lower ■ the Caesarian colony. The four African towns with a summa honoraria of HS2,000 are Thamugadi, a veteran colony founded by Trajan (no. 356); Verecunda, a veteran *vicus* that later became ■ municipium (*C.* 4205, 4220; no. 375); Medeli, a veteran *pagus* founded by Augustus (no. 374; *C.* 885); and Hr. esch-Schorr, ■ settlement in Byzacena whose status and origin are unknown (no. 376). Since three of these four towns were certainly of military origin, it is tempting ■ infer that HS2,000 ■ a standard basic level for the summa honoraria at veteran settlements, although some other centres of this type had higher summae honorariae which were multiples of that sum (nos. 365, 367, 362, 355, 371).

The importance of the summa honoraria as a source of public revenue probably varied widely from city to city. At a number of African towns, not ■ a rule the largest ones, there are instances of magistrates being allowed to apply their summae honorariae to the expense of a statue put up in honour of their tenure of office.[60] This may indicate that ■ the cities concerned revenue needs were being sufficiently met from other sources, or it may indicate slack financial administration, of the kind to which cities in the Roman Empire were often prone.

Private fortunes and incomes

Apuleius gives in his *Apology* figures for the fortunes of three members of the African local aristocracy, two at Oea in Tripolitania and one at Madauros in Numidia Proconsularis (nos. 383–385). The amounts range from 4 million to ■ million sesterces. These ■ may appear large for provincials below senatorial rank, but they are not completely atypical of the upper class of African society. The considerable number of African ■ implies the existence of a substantial class of African millionaires, amongst whom the men who actually reached the Senate were doubtless only the most influential. (HS1 million was the senatorial property qualification). More than 200 senatorial families have been identified as being connected with the African provinces, in the period from Vespasian to Septimius alone, though it is not invariably certain that they ■ native.[61] More than 200 non-procuratorial knights are found in the indices to *CIL* VIII (supp. 5, fasc. ii), and more appear in the smaller collections of African inscriptions.[62] The equestrian property qualification was only HS400,000, but there ■ many knights whose fortunes were much larger than this. The largest known African gift, the Sicca alimentary scheme, whose value was HS1,300,000 (no. 248), was provided by a knight, though the great majority of African donors were neither senators nor knights at the time of their benefactions. At the beginning of the third century

[60] Some examples are *C.* 14370 (no. 127, Avedda); *C.* 26255 (no. 103, Uchi Maius); *ILAf* 119 (Sufetula); *AE* 1946, 234 (no. 211, Themetra). There were, of course, other important sources of civic revenue besides the summae honorariae, in the form of rents from public land, etc. (A. H. M. Jones, 'The Cities of the Roman Empire,' *Recueils de la Société Jean Bodin*, VI, i, 1954, pp. 165–167.) Debbasch's suggestion that the Cirtan summae honorariae show 'd'une façon assez complète le budget de [cette] cité' is implausible (Y. Debbasch, 'Le Vie ■ les Institutions municipales de ■ Carthage romaine,' *Rev. Hist. du Droit*, 1953, p. 356).

[61] I owe this information to Mr. John Morris's Ph.D. thesis, 'The Roman Senate A.D. 69–193' (London, 1952), kindly lent by the author.

[62] *ILAlg*, *ILAf*, *ILTun*, *ILM*, *IRT*.

Africans also held a relatively high proportion of the procuratorial administrative posts, whose pay-scales ranged from HS60,000 to HS300,000 per year: twenty-five to thirty posts out of a total of 174 under Septimius.[65] At Saldae in Mauretania at some time after the reign of Marcus there was a sufficient abundance of knights who were not decurions for sportulae to be given to them ■ a distinct group (no. 297).

It is relevant to consider here the rate of return that could be expected from private capital. There is no explicit information about the money yield of African land; but the 5 per cent. interest-rate on foundations in Africa must give some notion of the minimum return that would have been available. This rate may in fact represent the yield on a mortgage, for the one western foundation whose mechanism is known, the Trajanic alimentary scheme in Italy, was maintained by farming out perpetual loans at 5 per cent. on tenfold security in land, to the local proprietors.[66] The rate of return on land under direct exploitation is never likely to be ■ low as the viable rate of mortgage payment in perpetuity; and it is possible that the yield on African land would often have been more than the 5 per cent. which prevailed on foundations. In Egypt there are indications that the annual money-yield of land in the second century A.D. was 12 or 15 per cent. of its value, though it is uncertain how much of this would have been clear profit.[67] Since Egypt was a province whose place in the economy of the Empire was comparable with that of Africa, it probably provides a better analogy than does Italy, where Columella and the younger Pliny both mention 6 per cent. as the usual return on land under normal cultivation.[68]

Some constitutional implications

1. *The number of decurions at African cities.* Two inscriptions appear to provide direct evidence of decurial numbers in Africa. The less controversial, ■ text from Sigus, a pagus of Cirta in Numidia, shows an *album decurionum* which has spaces for twenty-six names. Though the stone is incomplete, the layout and surviving dimensions suggest that there were little more than thirty names in all; and an ordo of thirty is authenticated at another small community in ■ western province.[69] A Commodan inscription from Thuburbo Maius (no. 302) apparently mentions 600 decurions at this town; although no effective alternative to the reading that implies this[69a] has yet been suggested, the text remains controversial, for there is no other explicit evidence from the West for ordos noticeably larger than 100 (other than that from the Hellenic Massilia), and there are difficulties in the way of recognizing such a large number of decurions at this town.[69b] A recent enquiry[70]

[65] Charles-Picard, *Civilisation*, p. 124.

[66] *ILS* 6675 and 6309.

[67] This percentage is arrived at by relating a number of second-century leases, and an average Egyptian land-price for the second century, to the general run of Egyptian wheat-prices for the second century. See Johnson, *Econ. Survey*, II, pp. 80–95, 147, 310–312.

[68] Pliny, *Ep.* VII, ■. It is true that Columella also implies that competent viticulture in Italy, even on poor soil, could bring in 20 per cent. or more, but this passage is clearly propagandist and must exaggerate enormously (*De. re ag.* III, 8–13).

[69] *Recueil* 1879, pp. 364–5. *C.* 19135. XXXviri are found at Castrimoenium in Latium, *CIL* XIV, 2458.

[69a] '[decuri]onib(us) n(umero) cc ccc denarios sing[ulos dedit]' (*ILAf* 266).

[69b] As Professor Charles-Picard has pointed out to me, the Curia at Thuburbo would be very much too small for a gathering of 600; the internal dimensions of its main chamber are 12·30 × 9·25m. (A. Merlin, 'Forum de Thuburbo Maius,' *Notes et Documents* (de la Tunisie), vii, 1922, p. 34). And

suggests that there is no secure evidence that Thuburbo Maius was a double community, as had long been thought; and this undermines the supposed significance of one of the two obvious elements that had lent verisimilitude to the total as a decurial statistic, the division of the figure into two distinct halves (see note 68). Though it remains intriguing that the number given in the Thuburbo inscription should be identical with the number of decurions known at three other cities of the Empire, the evidence seems for the moment too isolated and insecure to be safely used as a basis for extrapolation about totals at other African cities.[71] Apart from the Sigus and Thuburbo inscriptions, the only other direct reference to decurial numbers in Africa is provided by the incomplete Album of Thamugadi of the mid-fourth century, too late to be relevant to the numbers that prevailed in the period being discussed.[72] Nevertheless, we should also expect to find instances of the normal ordo-size of 100[73] in Africa, as in other western provinces; and this is what inference from financial and archaeological sources does in fact reveal at a number of cities. Two foundations for the distribution of sportulae to the decurions provide exact, or virtually exact, indications of ordo-numbers at the cities concerned; while two others give rough indications. And the physical remains of the Curiae (senate-houses) of at least six more cities tell us something of the total of decurions that was in force at the time when they were built.

The financial evidence first. The Sufes foundation (no. 256), which had a capital of HS50,000, all of whose income was to be devoted to the distribution of sportulae to the decurions on a single occasion each November, can be reconstructed thus: the income of HS2,500 (supposing the normal 5 per cent., note 44) exactly suffices for the distribution of sportulae of HS20 per head to 125 recipients, precisely the number of decurions and praetextati found in the Canusium Album of A.D. 223 (100 decurions and 25 praetextati). Furthermore, HS20 is the rate found in the two African foundations for sportulae whose details are known (nos. 251 and 262). None of the twenty other possible reconstructions of the Sufes provision leads to an ordo-size which has [illegible] authentication elsewhere, apart from an obscure permutation that would allow a total of thirty decurions, which is impossible for a colony.[74] We also notice that the Sufes foundation was probably close in date to

since Thuburbo was not a very large town (G. L. Feuille, *Thuburbo Maius*, Tunis, 1950) it would be surprising if its population could muster 600 men rich enough to pay the summa honoraria, assuming that this was asked of decurions at this town. No. 364 (HS3,000 for the quinquennalitas) is the only surviving Thuburbo summa honoraria.

[71] L. Teutsch, 'Gab es "Doppelgemeinden" im römischen Afrika?' *Rev. Internat. des Droits de l'Antiquité*, viii, 1961, pp. 280–356, esp. pp. 329–332.

[72] Massilia, Tiberias and Antioch had 600 decurions (Liebenam, p. 229).

[73] Leschi, p. 247 ff., provides the most recent edition of the Thamugadi Album. The effective total that survives is 160 (excluding the patrons, as at Canusium, *CIL* IX, 338).

[73] Liebenam, p. 229 ff. The present method of financial inference as a means of deducing ordo-sizes was suggested by a calculation in R. Meiggs' *Roman Ostia* 1960, p. 181.

[74] Canusium Album, *CIL* IX, 338. I owe this telling conjecture, made in reply to a less exact reconstruction of my own, to Professor Charles-Picard. It has also provided the starting-point for the reconstruction of a Gor foundation (no. 263, see Appendix, p. 114). The numerical possibilities that a sportulae foundation of HS50,000 allows can be shown thus:

African sportulae rates	Number of shares at 5% interest (yield HS2,500)	at 6% interest (yield HS3,000)	at 12% interest (yield HS6,000)
[illegible]	25	30	60
20	125	150	300
[illegible]	208	250	500
8	312	375	750
6	416	500	1,000
4	625	750	1,500
2	1,250	1,500	3,000

the Canusium Album; for neither of the names mentioned in the Sufes inscription (*C.* 11430) has the tribe (this suggests a date after 212), and the inversion of the conventional phraseology, with the name of the ordo making the dedication here preceding that of its benefactor whose statue was being erected, is probably also symptomatic of lateness. But since the main concentrations of dated African gifts cease with the Severi (see Tables I and II below), the date is unlikely to be after the reigns of Severus Alexander or Gordian III.

A reconstruction almost equally exact can be made from a foundation at Abthugni (no 262; the date is probably earlier than that of the Sufes foundation, for the tribe and filiation of the donor are given, and the text is very concise). The complex details of this foundation, whose yield was septennial, are worked out below (Appendix, p. 114); though the interest-rate is not given, the expected 5 per cent. is the only one which will make sense of the financial details, and the sportulae-rate, which is stated as HS20, shows that money would have been available for 105 decurions at most; but it is [redacted] likely that the ordo was one of 100, and that the small surplus was applied in another direction (Appendix, p. 114). The sportulae foundation at Gor, a civitas, probably indicates an ordo of 100, whose benefit was shared by twenty-five praetextati [redacted] at Sufes (no. 263, see Appendix, p. 115); the Uchi foundation (no. 265) probably yielded sportulae for no more than 100, unless one of the more obscure interest-rates prevailed here (see Appendix, p. 115). Sportulae foundations are also found at Thisi and Thugga (nos. 251, 260, 261), but no conclusive reconstruction of the ordo-totals which these imply seems possible [redacted] present.

Six more additions to the list of ordo-totals can be tentatively made from archaeological evidence. Thuburbo Maius, Sufetula, Madauros, Thamugadi, Cuicul and Tipasa in Mauretania all have Curiae with an area in the region of 120 sq. m.[78] The total length of seating-space, assuming the orthodox plan in each case of six rows of seating, three on either side of the room, varies only within the range of 65–85 m. approximately. This implies that the standard western ordo of 100 decurions or thereabouts, was being provided for when each of the buildings was put up. For one-hundredth of the mean seating-length, 0.65–0.85 m., or roughly 2–3 ft., seems a reasonable allowance of chair-space per man. The variations in total seating length are not of an order to suggest corresponding differences in the number of occupants; they probably represent no more than the amount of human inconsistency or individualism that one might expect in the carrying out of a basic standard plan by local architects at a series of secondary towns.

To recapitulate: a Commodan ordo of 600 may be indicated by an inscription at Thuburbo Maius, though the Curia at this city suggests 100 decurions at the time that it was built; ordos of 100 with twenty-five praetextati can be inferred at Sufes and at Gor; ordos of 100 without any necessary supplement are inferred at Abthugni, Uchi Maius, Sufetula, Madauros, Thamugadi, Cuicul and Tipasa; and an ordo of thirty is indicated at Sigus. Thuburbo Maius, Gor, Abthugni and Uchi Maius were in Zeugitana, Sufes and Sufetula in Byzacena; Thamugadi, Cuicul and Sigus were in Numidia, and Madauros and Tipasa were respectively in Numidia Proconsularis and Mauretania Caesariensis.

[78] Merlin (cited in note 69 above), pp. 32 and 34, n. 4–8.

2. *Curia numbers and sizes.* Two levels are known for the number of curiae ('tribes') per city in Africa: ten ▬ attested at Althiburos in Byzacena[76] and at Lambaesis in Numidia;[77] while eleven ▬ known at Thuburbo Maius in Zeugitana, Theveste in Numidia Proconsularis,[78] and Lepcis Magna in Tripolitania (cf. no. 358).[79] Further instances of both sizes are suggested by the foundations for curial feasts. The foundation at Abthugni in Zeugitana strongly implies ten curiae at this city (see note to 262); while the amount of the quinquennial foundation at Hadrumetum in Byzacena (HS11,000, no. 264) suggests eleven curiae.

The standardisation of prices for curial feasts (nos. 271–279), reasonably consistent among the seven examples, with only ▬ large exception, strongly suggests that the number of members of each curia was restricted, and that these groupings did not embrace all the citizens. For it is very hard to believe that the populations of five towns as various in size, status and importance ▬ Uthina, Theveste, Hadrumetum, Mactar and Abthugni[80] can have been ▬ close in numbers as the feast-prices (HS300–HS225 per curia) would imply if it were held that they were intended for the entertainment of all the citizens. The view that the curiae were limited in numbers has also been put forward on other grounds by Gsell, Toutain and Charles-Picard.[81] It may be noted that HS250, the commonest surviving cost for a feast for a curia (see nos. 274–276+Appendix) is equal ■ 1,000 *asses*, a total which is unlikely to be merely the result of chance. We should expect the curiae, granted that their numbers were restricted, to have ■ membership in round figures (at least on the analogy of ordo-sizes), and it would be appropriate that the less distinguished and less exclusive body, that of curiales, should outnumber the ordo decurionum. It is thus conceivable that the figure here may imply a round price of 10 asses per man (or HS2½), and so a membership for each curia of 100, equal to the ordo-size most usual in the west, and a total per city of 1,000 or 1,100 curiales.[81a] The overwhelming preference for round figures shown by the African prices gives the basis of this hypothesis some plausibility, and the figure of HS2½ per man is at least low enough to be consistent with the custom of giving benefits to the decurions

[76] *C.* 16472.

[77] *C.*, p. 283; Liebenam, pp. 214–215.

[78] *ILTun* 728; *Rev. Afric.* 1956, p. 310.

[79] *IRT*, p. 263, index IX. The figure for the number of curiae that is known elsewhere in the west, twenty-four, bears no perceptible resemblance ■ the African totals. (Turris Libisonis in Sardinia, *ILS* 6766; and Lanuvium in Latium, *ILS* 6199, where the reading '*n(umero)* XXIIII' is preferable to Dessau's '*n(ummos)*,' as Hirschfeld evidently recognised, *Hermes*, 1■■1, p. 150, n.) The dissimilarity in numbers might well support Gsell's view that the African curiae were ■ partially independent evolution from the political clubs that had existed in the Punic period.

[80] Broughton and *AAT passim*.

[81] J. Toutain, *Cités romaines de* ■ *Tunisie*, 1896, pp. 284–285; S. Gsell, *Histoire de l'Afrique du Nord*, II, pp. 232–233; Charles-Picard, *Civilisation*, p. 28. The opposite interpretation is argued at length by J. Roman, who suggests that the African curiae should be regarded as tribes in the literal Roman sense, *i.e.* as voting divisions of the people as a whole (*Annales de la faculté* ■ *Droit d'Aix*, 1910, pp. 85–123). An inscription from Thubursicu Numidarum which speaks of 'ordo et populus in curias contributus' (*ILAlg* I, 1295) might appear to lend colour to his thesis, but it is not conclusive. For there was always an element of euphemism or at least hyperbole in the use of the term 'populus' in the context of financing dedications, since the process must have been carried out by agents only partially representative of the citizens as a whole. It is posible that 'populus' when used in an active sense in the inscriptions should generally be understood as meaning the curiae of a town, the nearest organisation to a popular representative body that existed in the cities of Roman Africa. Two Sufetula dedications financed by 'universus populus curiarum' probably support this view (*C.* 11349; *ILAlg* 138). Two more inscriptions clearly imply that the curiae were restricted at the cities from which they come, Theveste and (Chaouat): *C.* 16556 (no. 309), 'curiis quoque et Augustalibus aureos binos et populo vinum dedit'; and *C.* 25371, 'epulum curiis et universo populo dedit.'

[81a] But see Addendum, p. 115.

at a higher rate than to their inferiors, a practice certainly current in Italy and followed elsewhere.[82] For decurions in Africa almost always received sportulae of HS4 or more, as far as we know (no. 303 is an early exception). The conjecture of 100 curiales per curia is also supported by the figures in a Thuburbo distribution: 'ob cuius operis dedicationem decurionibus denarios singulos et cur(i)is singulis denarios quinquagenos dederunt.'[83] We can be fairly sure from the evidence already cited that the rate per curialis would have been lower than the rate per decurion, and hence in interpreting this distribution, we should look for a rate per curialis below the HS4 which each decurion received. HS3 is unknown as a sportula, but HS2, or half a denarius, is explicitly found in two instances in Africa (nos. 303, 304), and this results in 100 members per curia (see note 83). *Cf.* also note 127.

The curial feast prices which differ from the figure so far considered indicate that the outlay for this purpose was not rigidly standardised; three of the five feast prices which differ (nos. 271, 272, 277) give exact figures of 20 asses (HS5), 12 asses (HS3) and 9 [illegible] per man if we apply the conjecture of 100 men per curia. The first of these may belong to a period of dearth (see p. 63), but quite apart from the question of food-price fluctuations, there is no reason why the level of generosity should not have varied among gifts for feasts; these differences are negligible compared with those that are found among sportulae (nos. 290–305). Only two feast figures conflict with the hypothesis of individual budgeting for a curia of 100 members: no. 273, where the income is HS288 (at the stated interest-rate of 12 per cent.), or HS12 short of the HS300 which would allow [illegible] interpretation of 12 [illegible] per man; and no. 276, where 60 denarii per curia is stipulated, this being 10 sesterces short of HS250, which would give 10 asses per man. In both [illegible] the approximation is close enough for the difference to be unimportant, and in both there also is a possibility that the figures engraved may fall slightly short of the amounts actually given (see notes to nos. 273 and 277).

RICHARD DUNCAN-JONES.

Two negative conclusions

1. *The Zarai Tariff.* The inscription[84] shows the duty payable upon goods passing between Mauretania Caesariensis and Mauretania Tingitana in the time of Septimius Severus. The items include slaves, livestock, fabrics, hides and wine; from these amounts Bourgarel-Musso, followed by Haywood,[85] deduces prices upon which the assessments were probably based, applying several ratios from Cagnat's 'Portorium chez les romains.' But the value of these conclusions [illegible] indication of prevailing price-levels is very limited; for the duty payable on each individual article was

[82] *CIL* X, 451, 544, 2408, 3927; *CIL* XIII, 1921; *RE* IV, cols. 2330–1; *AE* 1914, 40 (examined in note 147) shows hierarchical distribution of sportulae at Lambaesis.

[83] *ILAf* 266, nos. 302, 308. The explanation of the custom found here and elsewhere, of rendering the sum bestowed on each curia collectively and not individually, as with decurial benefits, may lie in the relative numbers involved: though it was evidently possible to make individual distributions on the spot to the (600?) decurions (no. 302), to have extended this treatment [illegible] the curiales, of whom there were probably 1,100 at Thuburbo (*ILTun* 728, 'undecim curiae'), would have greatly prolonged the ceremony of dedication, and would have [illegible] the presence of crowds of unwieldy size. Hence it is understandable that a lump sum should have been given to each curia as an entity, to be subsequently distributed among its members or to pay for one of their regular dinners.

[84] *C.* 4508.

[85] Haywood, pp. 81–82.

evidently fixed at the amounts stated, though it is clear from other sources that prices of slaves, cattle, pigs and donkeys varied very widely in the Roman world, and by extension this is likely to have been true of most other articles on the list.[86] Not only was there no allowance in the charge levied at Zarai for variations in the quality of the goods, but there was no discrimination between the amount levied on a boy slave and that levied on a man, or between men and women, or between full-grown animals and their young, though such differences affected prices drastically where the information is known.[87] The only comparison with other African sources which can be made is with another slave-valuation; unfortunately, this comes from a text that gives only the cash value at which any slave would be assessed for the purpose of levying a fine on his master, in cases of trespass.[88] It shows that the authorities assumed the value of any slave for purposes of justice, as well as for levying customs duties, at the convenient round figure of 500 denarii, or HS2,000, but it does not provide a market price.

Almost all the prices inferred from the Zarai tariff appear high when compared with the material from Egypt,[89] but whether this is more an indication of extortionate administration or of price-levels which were higher in Africa than in Egypt, it is impossible to say. The system shown by the tariff is in fact one of broadly graded tolls[90]; it is not a true *ad valorem* system of the kind that modern European customs regulations enforce.

2. *Sesterces and shillings.* The method generally used for translating Roman currency,[91] a flat equation in terms of comparative bullion content, will not stand up to examination, for there is very little reason to suppose that the buying power of precious metal has remained a constant during the last 2,000 years, despite the survival of gold-standards through long periods of both Roman and modern history. The value of gold and silver in terms of goods depends critically upon the quantity of goods against the quantity of gold and silver currency in circulation; these functions are bound to vary according to the productive capacity and the stock of precious metals of the society concerned, not to mention the extent of any fiduciary element in the currency. Although gold and silver could theoretically have exactly the same purchasing power at different dates 2,000 years apart, if by some miracle these variables retained the same ratios, it is very much more probable that changes have taken place in the real value of the precious metals, completely vitiating any usefulness that they might have had as a means of interpreting the value of ancient currencies.

A sound basis for an attempt to translate sesterces into sterling would be an investigation of their relative purchasing power, as seen from a direct comparison of similar costs. But the effective result of translation by this method, using the most obvious data, is only to reveal differences between Roman and modern price-structures. An equation of HS2 with the current £1 sterling converts post-Domitianic legionary pay (HS1,200 p.a.) into £600 a year, and perhaps fits some of the building-prices attached to remains; but prices for wheat, the basic foodstuff in the ancient world, do not correspond with this equation in the slightest. HS2–4 worth of English wheat (a modius or about 17 lb. weight[92]) at present costs about 3s. (August 1961), or between one-seventh and one-fourteenth of the level that would seem appropriate from legionary pay. This isolates the fact that the modern ratio between the price of a 'modius' of wheat and a fair living wage (assuming this as £600 a year) is several times larger than the corresponding Roman ratio (the relationships being of the order of 1:4,000 against 1:600–300, going on the figure of HS1,200 for legionary pay). But since the amount by which milling, baking and retailing add to the cost of bread is almost certainly greater today than it was in the Roman world where the process was less mechanised, and involved fewer middlemen, it is doubtful how much even this discrepancy tells us. At any rate it seems unsafe to look for a universal formula with which to translate Roman into modern currency, since equation in terms of legionary pay will price wheat seven or fourteen times too high, and equation in terms of wheat-prices reduces legionary pay to £90 or £45 per year, almost meaningless in present-day terms.

[86] See L. C. West, 'The cost of living in Roman Egypt,' *Class. Phil.*, 1916, pp. 293–314, especially Tables II–V.

[87] For slave-prices, A. H. M. Jones, *Econ. Hist. Rev.*, 1956, pp. 185–199, reproduced in M. I. Finley, ed. *Slavery in Classical Antiquity*, 1960.

[88] *C.* 23956.

[89] West, *loc. cit.*, and A. C. Johnson in *Econ. Survey*, II.

[90] There was the same duty on cattle as on donkeys, although it is unlikely from the Egyptian evidence (to which we can add HS115 as the purchase price for a cow or bull in Germany under Claudius, *AE* 1920, 42), that their prices were generally the same.

[91] See, for instance, F. Hultsch, *Griechische und römische Metrologie*, 1882, p. 917; Frank, *Econ. Survey*, V, p. 153; SEHRE[2], p. 470.

[92] Pliny, *NH* XVIII, 12, 67, gives the weight of a modius of African wheat as slightly over 17 lb. avoirdupois. For Roman wheat-prices, see note 159.

TABLES

Table I

Median averages have been given, half the sum of the two medians being shown where the sample number is even.

Section A: Private building outlays and other large expenditures

VESPASIAN	DOMITIAN	NERVA	TRAJAN	HADRIAN
HS200,000	80,000 (?+)	42,000 (?+)	90,000	200,000+
			20,000 (?+)	70,000+
				(60,000)
				(52,600)
				50,000+
				median =
				(60,000)

ANTONINUS	MARCUS	COMMODUS	SEPTIMIUS	CARACALLA
500,000	1,300,000	1,000,000+	120,000	696,000+
50,000	150,000	145,000+	100,000 (?+)	100,000
30,000	70,000	20,000	77,000	100,000
median =	63,000	6,000+	50,000 (?+)	3,000+
50,000	24,000+	*median =*	21,200	*median =*
	median =	*(82,500)*	8,000	*100,000*
	70,000		7,000+	
			median =	
			50,000	

S. ALEXANDER	GORDIAN III	GALLIENUS	PROBUS	DIOCLETIAN
90,000	5,000+	200,000 (?+)	28,000	950,000+
12,000		67,500		61,000 (?+)
10,000+		50,000		*median =*
median =		41,200		*(205,500)*
12,000		*median =*		
		(58,750)		

Vespasian, no. 3 Lepcis; *Domitian*, no. 7 Lepcis; *Nerva*, no. 402 Carthage; *Trajan*, no. 324 Carthage; no. 56 Lepcis; *Hadrian*, nos. 281 Carthage, 8 Thugga, 254 Uthina, 34 Capsa, 12 Thugga; *Antoninus*, nos. 63 Lepcis, 305 Oea, 36 Cuicul; *Marcus*, nos. 248 Sicca, 45 Thugga, 9 Mustis, 11 Theveste, 17 Numluli; *Commodus*, ▬ 249 Oea, 4 and 260 Thugga, 331 Theveste, 71 Furnos Maius; *Septimius*, nos. 253 and 67 Thugga, 5 Thugga, 33 Thubursicu Numidarum, 13 (Duamis-ea-Slitnia), 330 Thamugadi, 23 Magifa, 24 (Hr. Sidi Navi); *Caracalla*, nos. 32–250–382 Theveste, 49 Thuburbo Maius, 6a Thugga, ■ Sarra; *S. Alexander*, nos. 400 Thugga, 38 (Hr. Udeka), 60 Mustis; *Gordian III*, no. 97 Mustis; *Gallienus*, nos. 398a Abbir Cella, 10 Macomades, 323 Thugga, 64 Thibursicum Bure; *Probus*, no. 409 Tichilla; *Diocletian*, no. 2 Calama, 63a Thugga.

Section B: Statues

Outlays providing more than one statue have been counted as single units. No account has been taken here of increases whose amount is unspecified.

TRAJAN	HADRIAN	ANTONINUS	MARCUS	COMMODUS
1 outlay	1 outlay	13 outlays	5 outlays	6 outlays
HS10,600	68,335⅓	12,000—	38,000—	12,000—
		800	3,000	2,000
		median =	*median* =	*median* =
		5,000	*6,000*	*(4,500)*

SEPTIMIUS	CARACALLA	S. ALEXANDER	TACITUS	LATE c. III
21 outlays	4 outlays	1 outlay	1 outlay	50,000
50,000—	12,000	5,200	16,000	32,200
1,500	4,000			
median =	*median* =			
4,800	*(6,500)*			

Trajan, no. 105 Thamugadi; *Hadrian*, nos. 83–84 Hippo Regius; *Antoninus*, nos. [illegible] and 139 Cillium, 150 Thamugadi, 117 Sutunurca, 133 Sitifis, 138 Sutunurca, 144 Agbia, 146 Pheradi Maius, 170 Lambaesis, 171 Lambaesis, 174 Agbia, 201 Vina, [illegible] Thuburbo Maius, 211 Themetra; *Marcus*, nos. 97 Sabratha, 101 Thugga, 189 Cuicul, 167 Cuicul, 197 Sutunurca; *Commodus*, nos. 104 Cuicul, 112 Cuicul, 142 Cuicul, 168 (Hr. Debbik), 190 (Hr. Debbik), 203 Biniana; *Septimius*, nos. 78 Thamugadi, 98 Thamugadi, 96 Verecunda, 103 Uchi Maius, 106 Ammaedara, 107 Diana, 108 Diana, 118 Tupusuctu, 143 Lambaesis, 159 Diana, 160 Thamugadi, 165 (Hr. Kudiat Setieh), [illegible] Diana, 178 Diana, 179 Thamugadi, 187 and 202 (Hr. Kudiat Setieh), 194 Lambaesis, 195 Medeli, 87 Safar, 204 Thignica; *Caracalla*, [illegible] 102 Cirta, [illegible] Verecunda, 172 Verecunda, 173 Verecunda; *S. Alexander*, no. 140 Sigus; *Tacitus*, no. 99 Membressa; late CIII, [illegible] 91 [illegible] and 92 Abthugni.

Bourgarel-Musso gives a table of African dated expenditures (*op. cit.*; reproduced without alteration by Haywood, p. 79) in which statues are not distinguished from other outlays. The disagreements between her table and mine are greater than can be justified by the amount of fresh material that has appeared since 1934, but since her figures are not accompanied by any references and the method of her analysis is vague, I have not attempted to elucidate the divergences.

TABLE II

Dated privately-financed public building

The unenclosed figures are the averages per reign-year; those in brackets are the number of 'private' buildings known per reign.

	AFRICA	OTHER WESTERN PROVINCES
Trajan	0·30 (6)	0·60 (12)
Hadrian	0·61 (13)	0·23 (5)
Antoninus	0·79 (18)	0·40 (9)
Marcus	0·73 (14)	0·21 (4)
Commodus	1·25 (16)	0·16 (2)
Septimius	1·19 (21)	0·25 (6)
Caracalla	1·48 (9)	
S. Alexander	0·76 (10)	0·15 (2)
Gordian III	0·87 (5)	0·17 (1)

The non-African data comes from the lists provided by J. C. Rockwell, *Private Beautiftungen für die Stadtgemeinde auf Inschriften der Kaiserzeit im Westen des römischen Reiches*, Jena, 1909, pp. 82–83. The difference between the size of the African sample and that from the other provinces is probably not historically significant, [illegible] Rockwell's survey does not draw on all the available evidence. The references for the non-African sample, from which I have excluded all inscriptions from Rome, are given in Rockwell, *op. cit.* Most of the African inscriptions used, together with others mentioning publicly-financed dedications, are cited in the final footnotes to the section on each reign in Romanelli, *Storia*. Each inscription has been considered on its merits, and I have excluded a few of those which Romanelli cites as building dedications. In addition to those in Romanelli's lists, the following inscriptions have been used: Trajan, *ILAf* 384, *ILAlg* 1, 2082; Hadrian, *C.* 15381, *C.* 16441; Antoninus, *C.* 26245, *ILAf* 238; Marcus, Leschi, p. 117; Commodus, *ILAf* 517; Septimius, *C.* 9015, *C.* 9320; Caracalla, *ILAlg* I, 3040, *ILTun* 718; S. Alexander, *C.* 1578, *C.* 9065, *C.* 15497, *C.* 26458; Gordian III, *C.* 1334.

TABLE III

Debasement of the silver coinage

	Debasement	Silver content as a proportion of Trajanic silver content
Trajan	15% approximately	1·00
Marcus	25% »	0·88
Septimius	50% »	0·58
Caracalla	63% »	0·43

Thereafter the stages in debasement became more rapid still, with little amelioration until the reign of Aurelian. See A. H. M. Jones, *Econ. Hist. Rev.*, 1953, pp. 293–298; for the limits (sometimes quite wide) within which the extent of debasement varied in the issues of a given reign, see *Econ. Survey*, V, pp. 91–93.

TABLE IV

Regional distribution of prices

Area	Price categories (see Synopsis, p. 47) I	II	III	IV	V	VI	Regional total
Zeugitana	30	32	[illegible]	26	23	18	133
Byzacena	7	6	1	3	6	[illegible]	27
Tripolitania	6	5	4	2	2	5	24
Numidia Proc.	14	16	2	8	7	5	52
Numidia	19	70	43	11	21	14	176
Mauretania Caes. ..	—	5	1	5	1	2	14
Mauretania Ting. ..	1	—	—	—	—	—	1
	77	136	54	[illegible]	60	46	427

Nineteen funerary stelai not assigned individual numbers have been included in the total here for section III, while the various foundations assigned two numbers under different headings in the list have been counted once.

PART III

PRICE-LIST

I. Buildings

Temples

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
***1.	(Capitol)	600,000	Lambaesis N	(193–197?)	*C.* 18226–7	93
2.	Apollo	350,000+	Calama NP	284–305	*ILAlg* I, 250	
3.	Mater Magna	200,000	Lepcis Magna PT	Jan.–June 72	*IRT* 300	94
*4.	Mercury	120,000+	Thugga PZ	(185–192)	*ILAf* 517	95
***5.	Saturn	100,000 (?+)	Thugga PZ	194–5	*C.* 26498	96
**6.	(Capitol)	100,000 (?+)	Volubilis MT	April–Dec. 217	*Hesperis*, 1927, p. 367	97
*6a.	[Genius . . .] Domini nostri	100,000	Thugga PZ	214	*ILAf* 527 + unpub. fragment	
7.	—	80,000 (?+)	Lepcis Magna PT	93–94	*IRT* 348	
8.	Fortuna	70,000+	Thugga PZ	119–138	*C.* 26471	
*9.	Fortuna	70,000	Mustis PZ	164–165	*C.* 15576	
10.	Pluto	67,500	Macomades [redacted]	265	*AE* 1905, 35	98
*11.	Saturn	63,000 (? +50,000)	Theveste NP	163–165	Leschi, p. 117	
12.	Concord, etc.	50,000+	Thugga PZ	117–138	*C.* 26467	99
13.	(Capitol)	50,000 (?+)	(Duamis-es-Slitnia) PZ	198–209	*C.* 25484	
PR 14.	Concord	40,000	Madauros NP	—	*ILAlg* I, 2035	
*15.	Pietas	30,000	Thugga PZ	late c. I–early c. II	*C.* 26493	100
16.	—	26,300+	(Bir-el-Faouera) PZ	—	*C.* 912	101
17.	(Capitol)	24,000+	Numluli PZ	169–170	*C.* 26121	102
18.	Concord	21,000	Gigthis PT	(Marcus [redacted] earlier)	*C.* 22693+*ILTun* 19	103
19.	—	20,000+	Thibursicum Bure PZ	—	*C.* 1463	
**20.	Saturn	13,180	Civitas Popthensis NP	—	*ILAlg* I, 1109	
PR 21.	Apollo	12,000	Muzuc PB	—	*C.* 12058	104
PR 22.	—	10,000+	Muzuc PB	—	*C.* 12067	

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
Temples (*cont.*)						
23.	Dii Magifae . . . simulacra deorum n(umero) V . . . et templum	8,000	Magifa NP	193–211 (?)	*ILAlg* I, 2977	
PR 24.	—	7,000+	(Hr. Sidi Navi) PB	195–196	*C.* 23107	
25.	Fortuna Redux	5,000+	Sutunurca PZ	—	*ILAf* 304	
26.	Mercurius Sobrius	3,000+	Sarra PB	211–212	*C.* 12006	105
Theatres						
27.	Promise of a theatre[106]	400,000 (?+)	Calama NP	—	*ILAlg* I, 286	
28.	Theatre[106]	375,000	Madauros [redacted]	—	*ILAlg* I, 2121	
Baths						
29.	Thermae	400,000	Thagura NP	—	*ILAlg* I, 1033	
**30.	Genio balineo	100,000	Castellum Mastarense N	226–228	*AE* 1908, 244–5	107
**31.	(Baths?)	100,000	Gibba N	194 and 195	*C.* 18547–8	108
Arches						
*32.	Quadrifrontal arch (+ 2 separate statues and tetrastyles)	250,000	Theveste NP	214	*ILAlg* I, 3040	109
33.	Arch of forum novum	77,000	Thubursicu Numidarum NP	198	*ILAlg* I, 1255	
34.	Arch w. statue of emperor and quadriga	42,600+ (? 10,000)	Capsa [redacted]	119–138	*C.* 98	
35.	Arch and statue	40,000	Madauros NP	—	*ILAlg* I, 2130	
PR*36.	Arch with [redacted] statues	30,000	Cuicul N	160–March 161	*AE* 1949, 40	110
PR 37.	Arch and statues	5,000+	Mustis PZ	238–244	*C.* 15572	

MISCELLANEOUS AND UNCLASSIFIED BUILDINGS

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
***38.	Bibliotheca	400,000	Thamugadi N	(pre-250)	*ILS* 9362	111
39.	Building with portico	300,000	Thagaste NP	—	*ILAlg* I, 877	
40.	—	300,000	Karthago PZ	—	*C.* 12533	
*41.	Arcaded enclosure ded. to Apollo	272,500	Lepcis Magna PT	—	*PBSR* 1955, p. 133	
42.	Rebuilding of forum with new portico and paving	200,000	Madauros NP	—	*ILAlg* I, 2120	112
43.	Restoration of building with porticos	200,000	Karthago PZ	—	*ILAf* 403	
45.	('Dar-el-Acheb')	150,000	Thugga PZ	164–166	*C.* 26527	113
46.	—	110,000	Lares PZ	(128?)	*C.* 16322	
47.	—	100,000	(Schuhud el Batel) PZ	—	*ILAf* 489	
48.	—	100,000	Thuburbo Maius PZ	213	*ILAf* 274	
49.	. . . novum	100,000	Cirta N	—	*C.* 6958	
50.	—	70,000 (?+)	Cuicul N	—	▬ footnote	114
50a.	—	47,000	Cirta N	—	*IL Alg* II, i, 717	
51.	—	40,000+	Lepcis Magna PT	—	*IRT* 788	
52.	Octagonal fountain	32,348 [*sic*]	Thamugadi N	early c. III	*BCB* p. 318	115
53.	Market	30,000+	Cuicul N	(Antoninus?)	*AE* 1916, 36	116
*54.	(Fountain?)	30,000 (?+)	Calama NP	—	*ILAlg* I, 298	
55.	—	30,000 (?+)	(Schuhud el Batel) PZ	—	*C.* 25847	
56.	—	20,000 (?+)	Lepcis Magna PT	101–102	*IRT* 352	
57.	Laet(it)iae (=portico?)	20,000	(Zawiet-el-Lâăla) PZ	—	*C.* 12434	
58.	Porticus ascensus fori cum spiritis et gradibus et capitibus et [epistyliis]	12,000	(Hr. Udeka) PZ	225	*C.* 15497	
59.	—	11,000	Celtianis N	—	*C.* 19698	

MISCELLANEOUS AND UNCLASSIFIED BUILDINGS (*cont.*)

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
60.	—	10,000+	Mustis PZ	222–235 (?)	*C.* 1578	
61.	—	10,000 (?+)	Cirta N	Commodus–Septimius	*C.* 6993	117
62.	—	5,000	Celtianis N	—	*ILAlg* II, i, 2106	

SECTIONS OF BUILDINGS AND MISCELLANEOUS CONTRIBUTIONS

***63.	Rebuilding proscaenium and scaenae frons of the Augustan theatre in Greek marble, and adding marble statues	500,000	Lepcis Magna PT	157–158	*IRT* 534	118
63a.	To improvement of templum Genii Patriae	61,000 (?+)	Thugga PZ	293–305	*C.* 26472	
64.	Ad musaeum (mosaic) [thermarum Gallienianarum]	41,200	Thibursicum Bure PZ	260–262	*ILAf* 506	119
65.	[Ad opus] amphitheatri	30,000	Rusicade N	—	*ILAlg* II, i, 34	
66.	Adornamenta [arcus]	25,000	Seressi PZ	—	*C.* 11216	120
***67.	(? + 4) cancelli aerei [ad] ornamentum rostrorum	20,000+	Thugga PZ	after 205	*C.* 26593	
68.	Ad opus curiae	10,000	Lambaesis ■	—	*AE* 1914, 40	
69.	In opus cultumque theatri	10,000	Rusicade N	Septimian or later	*C.* 7960	
70.	Restoration of building	8,000 (?+)	Matera PZ	—	*C.* 25430	

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
71.	Pronaos templi Mercurii, cum ornamentis	6,000 (?+)	Furnos Maius PB	183–185	*C.* 12030 + 12039	
72.	Ad opus theatri	5,000	Ammaedara PB	198–211	*ILTun* 460	
73.	Aedes for statue (v. 95)	4,400	Thamugadi ■	mid-c. II	*C.* 17831	
74.	Ad opus theatri	4,000	Rusicade N	225	*ILAlg* II, i, 37	
75.	[Ad per]fectionem operis tea[tri] (*sic*)	2,000	Rusicade N	—	*ILAlg* II, i, 34	
D76.	Ad ampliationem templi Caelestis gradus donavit	500	Tuccabor PZ	—	*C.* 14850	

II. Statues

(*a*) *Multiple gifts (donations of three ■ more)*

*77.	16 statues	1 million sesterces (66,666)	Lepcis Magna PT	—	*IRT* 706	
78.	5 statues	50,000 (10,000)	Thamugadi N	196–211	*AE* 1941, ■	121
*D79.	4 statues	36,020 (9,005)	Lepcis Magna PT	—	*IRT* 700	
80.	(some)	30,000	Cuicul ■	(160's?)	*AE* 1920, 114	122
81.	3 statues without bases	21,000+ (7,000+)	Cuicul N	—	*AE* 1916, 12 and 16	

(*b*) *Silver statues, stated as such*

*82.	Aunt of emperor Septimius	144⅔ pounds (HS115,000+)	Lepcis Magna PT	late c. II	*IRT* 607	123
83.	Deity with gold crown	51,335$\frac{7}{12}$ [*sic*]	Hippo Regius NP	117–138	*ILAlg* I, 10 + *BAC* 1938–40, p. 135	

(*b*) *Silver statues (cont.)*

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
84.	Imagines argent. Imp. Caes. Traiani Hadriani	HS17,000	Hippo Regius NP	117–138	*ILAlg* I, 10 + *BAC* 1938–40, p. 135	
85.	Signum [argent?]	50,000	Theveste NP	—	*ILAlg* I, 3066	
86.	Statuncula Mercurii	14,000	Lambaesis N	—	*C.* 18233	
87.	Imago argentea of Septimius	3 pounds silver value approx. HS2,400 at 50% debasement)	Safar MC	202–209	*C.* 9797	
88.	Imago argentea Faustinae	1,593	Cillium PB	139–161	*AE* 1957, 77	

(*c*) *Bronze statues stated as such*

89.	Baliddiris	4,000	Sigus N	post-211	*C.* 19121	
90.	Marcus non regnans	2,000(?+)	Thuburbo Maius PZ	139–146	*ILTun* 714	

(*d*) *Other statues* (generally marble where nothing is known to the contrary)

91.	—	50,000	Vallis PZ	(inflationary)	*ILTun* 1282	
D92.	—	33,200	Abthugni PZ	(inflationary)	*C.* 11207	124
93.	Hercules cum tetrastylo	33,000	Rusicade ■	—	*ILAlg* II, i, 34	
94.	Victoria . . . cum tetrastylo	30,000	Rusicade N	217–222?	*ILAlg* II, i, 10	
*95.	Annia Cara (v. 73)	22,000	Thamugadi N	mid-c. II	*C.* 17831	
96.	Genius patriae	20,000	Verecunda N	193–195	*C.* 4192	
97.	Marcus & Verus	(19,000)–38,000	Sabratha PT	169–170	*IRT* 22	
98.	Concord & ?	(17,500)–35,000	Thamugadi ■	198–211	*C.* 17829	

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
99.	Victoriae Aug. (2 statues?)	16,000+	Membressa PZ	275–276	*C.* 25836	
100.	Fortuna Redux	16,000	Thamugadi ■	Commodus or later	*C.* 2344 ; 17812	
*101.	Marcus & Verus (*colossi*)	(15,000)–30,000	Thugga PZ	173	*ILAf* 561; *ILTun* 1406	
102.	Caracalla	12,000	Cirta N	213–217	*ILAlg* II, i, 570	
103.	Septimius (*equestrian*) (without base)	12,000+	Uchi Maius PZ	197	*C.* 26255, *cf.* 157	125
*104.	Divus M. Antoninus (M. Aurelius)	12,000	Cuicul N	180–192	see footnote	114
*105.	Victoria Parthica	10,600	Thamugadi N	116	*C.* 2354	126
106.	Iulia Domna	10,000+	Ammaedara PB	193–211	*ILTun* 460	
107.	Divus Commodus	10,000+	Diana N	199–200	*C.* 4596	
108.	Septimius	10,000+	Diana N	196–197	*C.* 4594; 18649	
*109.	Victoria Germanica	9,000	Verecunda N	213	*C.* 4202; 18494	127
110.	—	8,000	(Hr. Bou Cha) PZ	—	*ILTun* 746	
111.	Genius Celtianis	8,000	Celtianis ■	—	*ILAlg* II, i, 2086	
112.	Virtus divi M. Antonini (M. Aurelius)	8,000	Cuicul ■	180–183	*BAC* 1911, p. 116	
113.	Genius kastell. Elefant.	8,000	Kastellum Elephantum ■	—	*ILS* 6865	
114.	Apollo	8,000	Giufi PZ	—	*C.* 858	
115.	Victoria	8,000	Giufi PZ	—	*C.* 12382	
116.	Victoria	8,000	Giufi PZ	—	*C.* 863	
117.	Antoninus Pius	8,000	Sutunurca PZ	146	*C.* 24003	
118.	Septimius	8,000	Tupusuctu MC	194–195	*C.* 8835	
119.	Neptunus	7,340	Calama NP	—	*ILAlg* I, 185	
120.	-(poss. bronze or silver)	7,100(?+)	Madauros NP	—	*ILAlg* I, 2152	

(*d*) *Other statutes (cont.)*

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
121.	Divus M. Antoninus Pius	7,000	Cuicul N	176–192	*AE* 1916, 14	
121a.	Signum Marsyae	7,000	Furnos Minus PZ	—	*AE*, 1961, 53	
122.	Mercurius	7,000	Theveste [redacted]	—	*ILAlg* I, 3007	
123.	Q. Fl. Lappianus	6,661 [*sic*]	Thabarbusi NP	—	*AE* 1960, 214	
124.	Minerva	6,140	Verecunda N	193–211 (?)	*C.* 4198	128
125.	Victoria	6,040	Thamugadi N	160–163	*C.* 2353	
126.	Victoria	6,000+	Cuicul N	—	*C.* 20148	
127.	Septimius & ? (*equestrian*)	(6,000)–12,000	Avedda PZ	196	*C.* 14370	
128.	Hercules	6,000	Calama NP	—	*ILAlg* I, 181	
129.	Genius populi	6,000	Cirta N	Commodus?	*C.* 6948	
130.	Genius populi	6,000	Cuicul N	—	*AE* 1914, 44	
131.	Iupiter Victor	6,000	Diana N	—	*C.* 4577	
132.	Marsyas	6,000 (probable)	Lambaesis [redacted]	—	*AE* 1914, 40	
133.	Antoninus Pius	6,000	Sitifis MC	155–156	*C.* 8466	
134.	Sex. Lucretius Rogatus	6,000	Tupusuctu MC	—	*C.* 8840	
135.	Minerva (?)	6,000	Tichilla PZ	—	*C.* 25861	
136.	—	6,000	Verecunda [redacted]	—	*C.* 18502	
*137.	Apollo	5,640	Calama [redacted]	—	*ILAlg* I, 177	
138.	Divus Hadrianus & L. Verus	5,525	Sutunurca PZ	146	*ILAf* 300	
139.	Antoninus & L. (Verus)	(5,203)–10,407 [*sic*]	Gillium PB	139–161	*AE* 1957, 77	
140.	Mars	5,200	Sigus N	222–235	*C.* 19124	
141.	Victoria & Mercurius	(5,000+)–10,000+	Cuicul N	—	*BAC* 1911, p. 115	
142.	Iupiter Omnipotens	5,000+	Cuicul N	182	*AE* 1908, 242	

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
143.	Caracalla non regnans	5,000+	Lambaesis N	208	*C.* 2711	
144.	Fortuna	5,000	Agbia PZ	138–161	*C.* 15550; 1548	
145.	Mercurius	5,000	Diana N	—	*C.* 4579	
146.	Victoria	5,000	Lambaesis ■	—	*C.* 18241	
147.	Neptunus, cum ostiis	5,000	Pheradi Maius PB	138–161	*ILTun* 246	
148.	Mercurius	5,000	Sarra PZ	—	*C.* 12001	
149.	—	5,000	Sitifis MC	—	*C.* 8497	
150.	Antoninus & M. Aurelius	(5,000)–10,000	Thamugadi N	139–161	*C.* 2362; 17864	
151.	Sol	5,000	Thamugadi N	—	*C.* 2350; 17815	
*152.	Bonus Eventus	5,000	Thibilis ■	—	*C.* 18890	
153.	Mercurius	5,000	Thignica PZ	—	*C.* 1400	
*154.	Genius Municipii	5,000	Thuburbo Maius PZ	Hadrian–Commodus	*ILAf* 240	
155.	Minerva	5,000	Thubursicu Numidarum NP	—	*ILAlg* I, 1236	
156.	Fortuna Redux	5,000	Thubursicu Numidarum NP	—	*ILAlg* I, 1223	
157.	Karthago Augusta without base (*cf.* 103)	5,000	Uchi Maius PZ	early c. III	*C.* 26239	
158.	Genius Ordinis	5,000	Verecunda N	—	*C.* 4187	
159.	Septimius	4,800	Diana N	195–196	*AE* 1933, 67	
160.	Victoria Victrix	4,800	Thamugadi N	198–211	*AE* 1941, 49	
161.	[Genius] ordinis	4,500	Thamugadi N	—	*C.* 2341	
162.	Hercules	4,400	Cuicul ■	—	*AE* 1914, 236	
163.	—	4,400	Verecunda ■	—	*C.* 4235	
164.	Iuno	4(?)200	Thuburnica PZ	—	*C.* 25702	
165.	Caracalla	4,200	(Hr. Kudiat Setieh) NP	201–209	*ILAlg* I, 951	
a 166.	Aesculapius	4,000+	Cuicul ■	—	*BAC* 1919, p. 97	

(*d*) *Other statues (cont.)*

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
167.	Concordia Augg.	4,000+	Cuicul N	166–169	*C.* 8300	
168.	Apollo	4,000+	(Hr. Debbik) PZ	181–182	*C.* 14791	
169.	Victoria Parthica	4,000+	Diana N	198	*C.* 4583	
170.	Minerva	4,000+	Lambaesis N	147–148	*C.* 18234	
171.	Fortuna	4,000+	Lambaesis N	147–148	*C.* 18213	
172.	Iupiter Conservator	4,000+	Verecunda ■	212	*C.* 4196	
173.	Iuno	4,000+	Verecunda N	212	*C.* 4197	
174.	Genius Curiae	4,000	Agbia PZ	138–161	*C.* 15550; 1548	
175.	Iupiter Optimus Maximus	4,000	Chidibbia PZ	—	*C.* 14875	
176.	Genius Senatus	4,000	Cuicul N	—	*AE* 1908, 241	
*177.	Victoria Augg.	4,000	Diana N	160–163	*C.* 4582	
178.	(Septimius?)	4,000	Diana N	193	Leschi, p. 274	
179.	Fortuna Redux Augg.	4,000(?)	Thamugadi N	198–211	*AE* 1901, 191	
*180.	Genius Populi	4,000	Tiddis N	214	*ILAlg* II, i, 3575	
PR181.	Genius Populi	4,000	Verecunda N	—	*C.* 4193	
182.	—	4,000	Verecunda N	—	*C.* 4250; 18504	
183.	Victoria	3,900	Thamugadi N	—	*C.* 17838	
184.	Genius Vici	3,700	Verecunda N	—	*C.* 4194	
185.	—	3,600	Madauros NP	—	*ILAlg* I, 2151	
186.	Baliddiris, cum base (v. 393)	3,600	Sigus ■	after 217	*C.* 19122	
187.	Septimius	3,400	(Hr. Kudiat Setich) NP	197–198	*ILAlg* I, 950	
188.	L. Sisenna Bassus	3,200	Abthugni PZ	—	*C.* 11201 + p. 2338	
189.	Marcus & Divus Verus	(3,000+) 6,000+	Cuicul N	169–170	*C.* 8318–9	
190.	Serapis	3,000+	(Hr. Debbik) PZ	183–184	*C.* 14792	
191.	Mercurius	3,000	Cuicul N	—	*AE* 1914, 237	
192.	Fides Publica	3,000	Cuicul N	—	*AE* 1914, 43	

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
193.	signum	3,000	Diana N	—	*C.* 4601	
194.	Genius leg. III Aug.	3,000	Lambaesitana Castra N	198	*C.* 2527; 18039	
195.	Iulia Domna	3,000	Medeli PZ	194	*C.* 885	
*196.	L. Cornelius Saturninus	3,000	Numluli PZ	—	*C.* 15392	
197.	L. Verus	3,000	Sutunurca PZ	162	*ILAf* 303	
198.	—	2,642 [*sic*]	Thubba [redacted]	—	*C.* 14296	
199.	Signum Marsyae	2,400+	Althiburos PB	c. III	*C.* 27771	
**200.	Caracalla non regnans	2,400	(Hr. Kudiat Setieh) NP	202–211	*ILAlg* I, 952	
PR201.	Divus Hadrianus	2,400	Vina PZ	138–161	*Karthago* ix, 1958, p. 92	
202.	Septimius	2,400	(Hr. Kudiat Setieh NP	198	*C.* 10833	
202a.	—	2,000+	(Hr. esch Schorr) PB	—	*C.* 11998	
203.	Commodus	2,000+	Biniana PB	186	*C.* 76	
204.	[Geta?] Caesar	2,000+	Thignica PZ	(pre-209 (?))	*C.* 15202	
205.	Pluto ♂ ?	(2,000+)–4,000+	Zama Regia PB	post-138	*C.* 12018	129
206.	Genius Coloniae Milevensis	2,000	Milev N	—	*C.* 19980	
207.	Mercurius	2,000	Thamugadi N	—	*AE* 1954, 144	
208.	Signum Herculis	[1?]220	Cuicul N	—	*AE* 1913, 154	
209.	Mars	1,000(?+)	Thamugadi N	—	*BAC* 1893, p. 157, n. 27	
210.	Minerva	900	(Hr. Bedjar) PZ	—	*C.* 14949	
211.	Antoninus Pius	800(?+)	Themetra PB	139–161	*AE* 1946, 234	
D212.	Liber Pater	460	Lepcis Magna PT	c. A.D. I	*IRT* 294	

III. Mausolea, Funerary Stelai and Altars

Mausolea

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
213.	P. Lucretius Rogatianius (completion of work already begun)	80,000	Lepcis Magna PT	—	*IRT* 721	
214.	C. Iunius Victor (centurion) leg. III Aug.	63,000	Mascula N	—	*C.* 2224; 17618	
215.	Pinarius Processianus	32,000(?)	Saltus Aurasius N	—	*C.* 2451; 17945	
216.	Saturninus	30,000	Madauros NP	—	*ILAlg* I, 2203	
217.	C. Cornel. Florentinus (centurion) leg. III Aug.	26,000	Lambaesis N	—	*C.* 2851	
218.	C. Iulius Martialis	26,000	Zarai N	—	*C.* 4524	
219.	Q. Gargilius Campanus	24,000	Auzia MC	233	*C.* 9109	
220.	Fabricia Silvana	12,000	(Ksar Ouled Zid) N	—	Leschi, p. 296	
221.	T. Flavius Maximus, praef. leg. III Aug.	12,000	Lambaesis N	222–237	*C.* 2764 (*cf. C.* 2624, 2568)	130
222.	. . . (centurion)	9,200	Lambaesis N	—	*C.* 3005	
D223.	Thanubdau	8,400 (?+4,000)	(Wadi Umm el Agerem) PT	—	*PBSR* xxiii, 1955, pp. 141–142	
224.	Octavia Rogata et Masupius Rogatianus	5,000	Avitta Bibba PZ	—	*C.* 12270	
225.	L. Domitius Aumura	1,000	(Hr. Oum el-Abbes) [Matmata] PT	—	*ILTun* 52	

Funerary stelai and altars

226.	One stele	5,000	Aquae Caesaris NP	—	*ILAlg* I, 2957	

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
227.	One stele	4,000	Lambaesis N	—	*C.* 3025	
228.	One stele	3,000	Lambaesis N	—	*BAC* 1916, p. 210(1)	
229.	One stele	2,500	Lambaesis N	—	*C.* 3079	
230.	8 stelai at	2,000	Lambaesis N	—	*C.* 2783; 2817; 2878; 2886; 2935; 4055; 4180; 18297	
231.	One stele	1,200	Karthago PZ	—	*C.* 24934	
232.	5 stelai at this price	1,200	Lambaesis N	—	*C.* 2815; 2877; 3016; 3654; 4387	
233.	One stele	1,200	Seriana N	—	*C.* 4587	
234.	8 stelai at this price	1,000	Lambaesis N	—	*C.* 2823; 2845; 2896; 2981; 3001; 3109; 3334; Musée I, 216 (unpublished)	
235.	One stele	1,000	Casa N	—	*C.* 4332	
236.	One stele	1,000	Lamiggiga N	—	*AE* 1938, 44	
237.	One stele	800	Lambaesis N	—	*C.* 3254	
238.	One stele	600	Lambaesis N	—	*C.* 3055	
D239.	One stele	600	Matmata PT	—	*ILTun* 53	
240.	One stele	500	Lambaesis N	—	*C.* 3668	
241.	2 stelai at this price	400	Lambaesis N	—	*C.* 3006; 3191	
242.	One stele	[illegible]	Hadrumetum PB	—	*C.* 22944	
243.	One stele	200	Lambaesis N	—	*C.* 2787	
D244.	One stele	96	Lambaesis N	—	*C.* 19162	
Altars						
245.	Hercules	1,000	Cuicul N	—	*C.* 20145	
246.	Marcus and Commodus	500	Tuccabor PZ	176–180	*C.* 14853	
247.	Numen Silvani	140	Cirta N	—	*C.* 6963	

Foundations

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
*248.	Alimenta for 300 boys aged 3–15 years ■ HS10 per month; [3]00 girls aged 3–13 years at HS8 per month	1,300,000 at stated 5% = 65,000 p.a. (annual residue HS200)	Sicca PZ	175–180	*C.* 1641 = *ILS* 6818	131
*249.	For sportulae to citizens, and ludi	1 million	Oea PT	183–185	*IRT* 230	132
*250.	Ut [certis diebus gy]mnasia populo publice in thermis prae[berentur] : (on 64 days in the year)	250,000 (12,500 p.a. if 5%)	Theveste NP	214	*ILAlg* I, 3040	133
*251.	Ludi scaenici quodannis natali eius . . . et decurio-[nib]us sing. sportulae quini (HS20)	200,000 (10,000 p.a. if 5%)	Thisi PZ	—	*C.* 25428 + *ILTun* 1190	134
*252.	Decurio[nibus item curiis omnibus] et augustalibus epula[to]ria	100,000 (5,000 p.a. if 5%)	Hippo Regius NP	—	*AE* 1958, 144	

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
253.	[Decurionibus] utriusq. ordinis sportulae, curiis e[pulum et universo] populo gymnasia, ludiq[ue scaenici]	100,000 (5,000 p.a. if 5%)	Thugga PZ	193–205	*C.* 26590/I	
*254.	Cur(i)is singulis annui (HS300) ut natali eius in publico vescantur	(60,000 if 5% and 10 curiae)	Uthina PZ	117–138	*C.* 24017	
255.	Epulaticium curialibus quodannis	50,000 (2,500 p.a. if 5%)	Mactar PB	late c. II	*C.* 11813	
256.	Divisiones dec(urionibus) quodannis die natali dei Herculis genii patriae	50,000 (2,500 p.a. if 5%)	Sufes PB	—	*C.* 11430	
257.	Cur[iis . . . ut ex] usuris . . . q[uodannis epularentur]	50,000 (2,500 p.a. if 5%)	Theveste NP	—	*ILAlg* I, 3066	
*258.	Six-monthly circuenses (*sic*) ce[ler]es, sportulae to decurions and 3 others, decoration of 2 statues	(40,000?) 1968 p.a. (HS32 annual surplus at stated 5%)	Auzia MC	—	*C.* 9052	136

Foundations (cont.)

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
*259.	In futuris ludi et sp[ectacula] omnibus annis die X . . . Ianuar. edantur	(40,000? if 5%) (2,000? p.a.)	Siagu PZ	—	*C.* 967; 12448	137
260.	Promise of foundation for sportulae to decurions of civitas only	25,000 (1,250 p.a. if 5%)	Thugga PZ	185–192	*C.* 26482	138
*261.	Sportulae [decurionibus pagi?]	25,000 (1,250 p.a. if 5%)	Thugga PZ	before 205	*C.* 26623	138
D*262.	Septimo quoque anno statua ex HS3,200 et epulationis nomine sportulae (HS20) decurionibus et curialibus [*sic*] (HS240)	22,000 (at 5%) (1,100 p.a., 7,700 at each septennial yield)	Abthugni PZ	—	*C.* 11201+ p. 2338	139
*263.	Decurionibus sportulae . . . et gymnasium universis civibus	12,000 (600 p.a. if 5%)	Gor PZ	—	*C.* 12422	135
264.	Quinsto [*sic*] qu[oque an]no univ[ersis curiis? epulum?]	11,000 (550 p.a. and 2,750 at each yield if 5%)	Hadrumetum PB	—	*ILAf* 58	140

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
*265.	Decurionibus sportulae et populo ludi	10,000 (500 p.a. if 5%)	Uchi Maius PZ	post-230	*C.* 26275	141
266.	. . . pugile . . . [gymnasium] et epulum decurionibus (perhaps also sportulae)	4,000 (200 if 5%)	Gor PZ	—	*ILTun* 769	
267.	Pugiles et gymnasium, itemque decurionibus epulum	4,000 at stated 6% (240 p.a.)	Gor PZ	—	*C.* 12421	
268.	Ex . . . usuris centesim. concuriales eius epulentur	2,400 % at stated 12% (288 p.a.)	Theveste NP	—	*ILAlg* I, 3017	142
269.	Quodannis ob diem dedicationis epulum et [gymnasium populo]	2,000(?+)	Mustis PZ	—	*C.* 15578	
Feasts[143]						
270.	Decurio[nibus item curiis omnibus?] et Augustalibus epula[to]ria	(5,000 in all annually)	Hippo Regius NP	—	=252	
271.	Epulum universis curi(i)s	5,000 (500? per curia on dedication)	(Zawiet el-Laâla) PZ	—	*C.* 12434	143
272.	Curi(i)s singulis . . . ut natali eius in publico vescantur	300 per curia annually	Uthina PZ	117–138	=254	
273.	To a single curia	288 annually	Theveste NP	—	=268	

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
Feasts (cont.)						
274.	Univ[ersis curiis? epulum?]	(250 each?) quinquennially	Hadrumetum PB	—	=264	
275.	Epulum (universis) curialib(us)	(250 to each curia if 10 curiae and 5% annually)	Mactar PB	late c. II	=255	
276.	To (curiae), epulationis nomine	240(?) each septennially	Abthugni PZ	—	=262; see Appendix, p. 115	
277.	Cur[iis ut . . .] q[uodannis epularentur]	(225 to each of 11 curiae (p. 73) if 5%; HS25 annual surplus)	Theveste NP	—	=257	
278.	Curiis e[pulum]	(part of 5,000) annually	Thugga PZ	soon after 205	=253	
279.	In epu[lationem]	2,000+	Uchi Maius PZ	early c. III	*C.* 26239	144
280.	Epulum decurionibus	(part of 240) annually	Gor PZ	—	=267 (*cf.* 266)	
Games[145]		*Price per day*				
281.	Gladiators and panthers in amphitheatre	(50,000+) 200,000+ for 4 days	Karthago PZ	soon after 133	*ILAf* 390	
282.	Ludi . . .	– (half of 50,000 annually?)	Oea PT	183–185	=249	
283.	Ludi scaenici	(8,000? for single day annually)	Thisi PZ	—	=251	

	Identification	*Price per day*	*Town*	*Date*	*References*	*Notes*
284.	Ludi	6,000 for a single day	Rusicade N	—	*ILAlg* II, i, 42–3	
285.	Ludi scaenici	(from part of 5,000) annually)	Thugga PZ	after 205	=253	
286.	Ludi	(2,000) 6,000 for 3 days	Siagu PZ	—	*C.* 967; 12448	146
287.	Circuenses [*sic*]	540 six-monthly	Auzia MC	—	=258	
288.	Pugiles	(part of 240) annually	Gor PZ	—	=267	
289.	Ludi	(100?) annually	Uchi Maius PZ	post-230	=265	

SPORTULAE

(*a*) *Examples whose rate is specified*

		Rate per head				
290.	Fl(amini)b(us) p(er)p(etuis) aurei singuli	100 on dedication	Lambaesis N	—	*AE* 1914, 40	147
D291.	Denarii quini to each decurion	20 annually	Thisi PZ	—	v. 251	
D292.	Denarii quini to each decurion	20 [illegible] dedication	Theveste NP	—	*ILAlg* I, 3072	
D293.	(Denarii quini) to each decurion 'epulationis nomine'	20 septennially	Abthugni PZ	—	v. 262	
D294.	Denarii terni to each decurion	12 on dedication	Cirta N	—	*ILAlg* II, i, 688	

SPORTULAE (*a*) (*cont.*)

	Identification	*Rate per head*	*Town*	*Date*	*Reference*	*Notes*
*296.	To wife and 2 nieces	8 (six-monthly)	Auzia MC	—	v. 258	
297.	Dec(urionibus) et eq(uitibus) R(omanis) victoriati [*sic*] terni sportulae	6 on dedication	Saldae MC	post-161	*ILS* 5078	
298.	Sportulae denarii singuli secundum matricem public. civibus	4 on dedication	Cirta N	—	*C.* 6948	
299.	Sportulae denarii singuli (decurionibus)	4 on dedication	Kast. Elephant. ■	—	*ILS* 6865	
D300.	To decurions and two clerks	4 six-monthly	Auzia MC	—	v. 258	
301.	To decurions	4 on dedication	Thuburbo Maius PZ	225	*ILAf* 271	
302.	[Decuri]onib(us) n(umero) CCC CCC denarii sing[uli]	■ on dedication	Thuburbo Maius PZ	186–189	*ILAf* 266	148
303.	To decurions 'asses octonos'	2 on dedications of 2 statues	Agbia PZ	138–161	v. 144, 174	
304.	To citizens	2 on dedication	Cirta N	—	*ILAlg* II, i, 688	
305.	Reliquis (HS4,000) omnibus civibus n. HS dividi volo	HS1 by bequest	Siagu PZ	—	*C.* 967 (v. 257) +12448	149

(*b*) *Examples whose total value is specified* (see also ▬ 305 above)

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
306.	Pudentilla . . . in populum expunxisset	50,000 at marriage	Oea PT	154–155	*Apol.* lxxxvii	
D307.	Curiis denarii quingeni	2,000 per curia on dedication	Thagaste NP	—	*ILAlg* I, 876	150
D308.	Curiis singulis denarii quinquageni	200 to each of the 11 curiae on dedication	Thuburbo Maius PZ	225	v. 301	
309.	Sportul. decurionib. et lib. Caes. N. itemq. forensibus et amicis curiis quoque et Augustalibus aurei bini	200 to each group (?) (after dedication)	Theveste NP	—	*C.* 16536	
310.	To each curia	120 on dedication	Verecunda N	213	v. 109; ▬ note 127	
311.	Corpori quoq. Augustalium ad sportulas aurei bini	200 (possibly recurrent)	Hippo Regius NP	—	*Libyca*, 1954, p. 394	
D312.	Curiis item dendrophoris denarii XX	80	Thamugadi ▬	—	*AE* 1954, 154	

(*c*) *Examples where neither total* ▬ *components are explicitly stated*

313.	Bequest for sportulae to citizens and ludi	(half? of 50,000 annually)	Oea PT	183–185	=249	
314.	Divisiones decurionibus	(2,500 annually)	Sufes PB	—	=256; see p. 71	

SPORTULAE (*c*) (*cont.*)

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
315.	To decurions	(part of 5,000 annually; perhaps rate as in 316 and 317)	Thugga PZ	after 205	=253	
316.	(Foundation) for sportulae (to decurions of pagus?)	(1,250 annually)	Thugga PZ	before 205	=261; see p. 94	
317.	Promise of foundation for sport. to decurions of civitas	(1,250 annually)	Thugga PZ	185–192	=260; ▬ p. 94	
318.	Foundation for sport. to decurions, and ludi	(400? at HS4? annually)	Uchi Maius PZ	after 230	=265	See 141
319.	Foundation for sportulae to decurions and gymnasium to citizens	(part of 600? annually)	Gor PZ	—	=263	

GYMNASIA (OIL-DISTRIBUTIONS)[161]

320.	Foundation for distributions to the people on 64 days annually (see also 251, 261, 267, 269)	(12,500 or 195 per day; HS20 annual residue if 5%)	Theveste NP	214	=250; see 151	

V. VOLUNTARY ▬ OBLIGATORY PAYMENTS TO CITIES

CAPITAL PAYMENTS TO CITIES

321.	Ad tutelam aquae [privatae]	200,000	Sabratha PT	—	*IRT* 117	

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
322.	Ad opus munificentiae suae patriae	100,000	Thagaste NP	—	*ILAlg* I, 876	
323.	[Reipu]bl. praesentibus	50,000	Thugga PZ	264	*ILTun* 1416	

INDIVIDUAL PAYMENTS IN HONOUR OF OFFICE (for [redacted] *honorariae* see next section)

(to the city unless stated otherwise)

324.	Ob. honor. aed(ilitatis)	90,000	Karthago PZ	114	*ILAf* 384	
325.	Ob honor. flam(onii) praesentia	82,000	Rusicade N	217–222 (Dessau)	*ILAlg* II, i, 10	
326.	Ob honor. pon[tificatus]	55,000	Rusicade N	—	*ILAlg* II, i, 34	
327.	Ob honor. aedilitat.	50,000	Karthago PZ	after 161	*C.* 24640	
328.	[Ob ho]norem . . .	50,000	Karthago PZ	—	*C.* 24644	
329.	. . . inib(i) legitim(a) ob honor. augurat(us)	34,000	Rusicade N	—	*ILAlg* II, i, 42–43	
330.	Ob honorem auguratus	21,200	Thamugadi N	198–209	*C.* 17837	152
331.	[Inlati]s aerario (probably for decurionate)	20,000	Theveste NP	180–182	*ILAlg* I, 3032	
332.	[Prae]ter HS $\overline{XX}$ $\overline{N}$ quae . . .	20,000	Cirta N	—	*Recueil* 1905, p. 257	
333.	Ob honorem flam(onii) (added to the financing of a temple privately erected)	10,000	Mustis PZ	164–165	*C.* 15576 (see no. 9 sup.)	

	Identification	Price (*HS*)	Town	Date	Reference	Notes
Individual Payments (*cont.*)						
334.	Ob honorem flamoni(i) (added to the financing of an arch privately erected)	10,000	Capsa PB	119–138	*C.* 98 (see no. 34 sup.)	
335.	[Ob ho]norem flam-(onii)	10,000	Thuburbo Maius PZ	mid-c. II	*C.* 12370	
336.	Amplius (ad honorariam summam) r(ei) p(ublicae) inlatis	8,000	Lambaesis N	208	*C.* 2711	
337.	Ob honorem auguratus inlatis super legitimam	6,000	Thamugadi N	202–211	*AE* 1941, 49	
338.	Ob honorem flamoni(i) (added to the financing of a temple privately erected)	4,000	Numluli PZ	169–170	*C.* 26121 (see no. 17 sup.)	
339.	Legitimam pollicitationemve	4,000	Thamugadi N	198–211	*AE* 1901, 191	153
340.	Ob [hon]orem flamoni(i)	1,000	Sutunurca PZ	162	*ILAf* 303	
341.	Amplius ad legitimam (flamonii)	1,000	Verecunda N	—	*C.* 4194	
Legacies to Single Curiae						
*342.	Ad remunerandos curiales curiae Aeliae	10,000	Neapolis PZ	—	*C.* 974	
*343.	Curiae [Caeles]tiae	10,000	Simitthus PZ	—	*C.* 14613	

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
D*344.	To 2 curiae, divided equally, for celebration of annual funeral rites for not less than five years	2,000	Simitthus PZ	—	*AE* 1955, 126	
SUMMAE HONORARIAE (see pp. 65–69)						
345.	Decurionate	20,000	Cirta N	—	*ILAlg* II, i, 529	
345a.	Decurionate	20,000	Rusicade N	—	*ILAlg* II, i, 10, 34	154
346.	Decurionate	4,000	Thubursicu Numidarum [redacted]	early c. III	*ILAlg* I, 1236	
347.	Decurionate	1,600	Muzuc [redacted]	—	*C.* 12058	
348.	Decurionate	400(?+)	(Munchar) PZ	161–169	*C.* 25468	
349.	Aedileship	20,000	Cirta N	—	*ILAlg* II, i, 473; 562	
350.	Aedileship	20,000	Rusicade N	—	*ILAlg* II, i, 42–43	
351.	Aedileship	5,000	Auzia MC	194–196	*C.* 9024	
352.	Aedileship	4,000	Theveste [redacted]	—	*ILAlg* I, 3007	
353.	Aedileship	4,000	Thubursicu Numidarum NP	early c. III	*ILAlg* I, 1223; 1236	
353a.	Aedileship	2,000?	Althiburos [redacted]	c. III	*C.* 27771	
354.	IIvirate	5,000	Bulla Regia PZ	208–210	*ILAf* 451	
355.	IIvirate	4,000	Cuicul N	—	*AE* 1914, 237	
356.	IIvirate	2,000	Thamugadi [redacted]	198–211	*BAC* 1893, p. 157, no. 27	
357.	IIIvirate	20,000	Cirta N	203, 210, 211	*ILAlg* II, i, 562; 569; 473	
358.	Undecimprimate	4,000	(Hr. Debbik) PZ	182	*C.* 14791	
359.	Sufeteship	800	Themetra PB	138–161	*AE* 1946, 234	
360.	Quinquennalitas	38,000	Karthago PZ	133	*ILAf* 390	
361.	Quinquennalitas	20,000	Cirta N	212–217	*ILAlg* II, i, 675	

SUMMAE HONORARIAE (*cont.*)

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
362.	Quinquennalitas (or flaminate?)	10,000	Ammaedara PB	193–211	*ILTun* 460	
363.	Quinquennalitas	10,000	Hippo Regius NP	117–138	*ILAlg* I, 10	155
363a.	Quinquennalitas	6,000	Bulla Regia PZ	198–199	Unpublished; see note 52	
364.	Quinquennalitas	3,000	Thuburbo Maius PZ	139–146	*ILTun* 714	
365.	Flaminate	12,000	Lambaesis N	208	*C.* 2711; *AE* 1914, 40	
366.	Flaminate	12,000	Uchi Maius PZ	197	*C.* 26255	
367.	Flaminate	10,000	Diana N	164–165 and 197	*C.* 4588; 4594 + 18649	
368.	Flaminate	6,000	(Hr. Sidi Navi) PZ	196	*C.* 23107	
369.	Flaminate	6,000	Avedda PZ	196	*C.* 14370	
370.	Flaminate	6,000	Thubursicu Numidarum NP	early c. III	*ILAlg* I, 1236	
371.	Flaminate	4,000	Sutunurca PZ	146	*ILAf* 300	
373.	Flaminate	2,200	Sigus N	after 217	*C.* 19122	
374.	Flaminate	2,000	Pagus . . . Medelitanorum PZ	194	*C.* 885	
375.	Flaminate	2,000	Verecunda N	213, etc.	*C.* 4202 + 18494; 4193; 4194; 4243	
376.	Flaminate	2,000	(Hr. Esch-Schorr) PB	—	*C.* 11998	
377.	Flaminate	1,000	Sarra PZ	211–212	*C.* 12006	
378.	Augurate	10,000	Sabratha PT	230–231	*IRT* 43	
379.	Pontificate	10,000	Cirta N	88–139	*C.* 7079	

VI. MISCELLANEOUS PRICES, PAYMENTS, VALUATIONS AND FRAGMENTS

BULLION

381.	Argenteum in kapitolio	312,000	Cirta N	—	*ILAlg* II, i, 538	156

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
*382.	[Datasque a]d kapitol-(ium) arg(enti) lib(ras) CLXX . . . auri lib(ras) XIIII (in the form of dishes and vessels)	(196,000 + workmanship, in terms of current coin issue)	Theveste NP	214	v. 32; 250	
FORTUNES[157]						
383.	Pudentilla, a widow	4 million	Oea PT	fl. *c.* 157	*Apol.* lxxvii	
384.	Herennius Rufinus, father-in-law of elder son of Pudentilla; a knight	3 million	Oea PT	fl. *c.* 157	*Apol.* lxxv	
385.	Father of Apuleius 'duumviralem cunctis honoribus perfunctum'	2 million (?+)	Madauros NP	Hadrian–Antoninus	*Apol.* xxiii, xxiv	
386.	Apuleius	1 million	Madauros NP	Hadrian–Antoninus	*Apol.* xxiii	
LAND AND GRAIN						
(*a*) *Land*						
387.	At oasis whose soil supported olives, figs, vines, pomegranates, corn, pulse and vegetables, yielding twice-yearly	16 per square of 4 short cubits (approx. 50,000 per iugerum)	Tacape (el-Hammam) PT	c. I A.D.	Pliny, NH xviii, 188	
388.	Exiguum heredíolum	60,000	Oea PT	Antoninus	*Apol.* ci	158

(*b*) *Grain*

	Identification	*Price* (*HS*)	*Town*	*Date*	*Reference*	*Notes*
D389.	10,000 modii of wheat as a gift to the city (famine level)	40 per modius	Thuburnica PZ	—	*C.* 25703–4	159
*390.	Sodalibus suis posterisque eorum	12 modii of grain annually (per man—no price	Madauros ■	—	*ILAlg* I, 2233	

VARIOUS SMALL OBJECTS AND OUTLAYS

391.	Dextri [*sic*] duo	4,000+	Rusicade N	—	*ILAlg* II, i, 42–43	
392.	(Statue base)	500	Tiddis N	—	*ILAlg* II, i, 3606	
393.	Statue base	400	Sigus N	after 217	v. 186	
394.	Marble vat 1·04 m × 0·81 × 0·51	200	Cirta N	—	*ILAlg* II, i, 491 (Louvre no. 2020)	160
D395.	Palma argentea to Saturn	100	Thuburbo Maius PZ	—	*ILAf* 256	
D396.	Palma argentea to Saturn	40	Thuburbo Maius PZ	—	*ILTun* 709	
D397.	Ad custod(em) ita ut statuam meam et (statuam) uxoris meae tergeat et unguat et coronet et cer(eos) II accendat	12 on two days per year	Auzia MC	—	v. 258	

FRAGMENTS AND OUTLAYS WHOSE NATURE ■ UNCERTAIN

398.	—	200,000	Cirta N	—	*ILAlg* II, i, 681	
398a.	—	200,000	Abbir Cella PZ	264–268	*ILAf* 222	161
399.	Iupiter maximus	100,000(?+) 226(000?)	Utica PZ	—	*ILTun* 1176	

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
400.	(From portico of temple of Caelestis)	60,000 and 30,000	Thugga PZ	222–235	*C.* 26458	162
400a.	Genius municipii	50,000	Sataf MS	—	*C.* 8389	
401.	List of seven sums	50,000–10,000	Karthago PZ	—	*ILTun* 1070	
402.	—	42,000(?+)	Karthago PZ	Jan. ■	*ILAf* 363	
D403.	—	28,000	Tichilla PZ	276–282	*C.* 14891	
404.	—	23,500	Sabratha PT	—	*IRT* 116	
405.	—	20,000(?+)	Thugga PZ	—	*C.* 26635	
406.	—	16,000	Althiburos PB	—	*C.* 1830	
407.	—	12,080	Thamugadi ■	—	*C.* 17914	
D408.	. . . ad quod opus sola * tria milia a fisco accepta sunt	12,000+	Simitthus PZ	—	*C.* 14590	
409.	—	10,000	Lambaesis N	—	*BAC* 1954, p. 168	
410.	—	10,000(?+)	Cuicul ■	—	see footnote 114	
411.	—	10,000	Lepcis Magna PT	—	*IRT* 789	
412.	—	5,000	Thamugadi N	—	*C.* 17913	
413.	—	5,000	Calama NP	—	*ILAlg* I, 309	
414.	—	4,000+ (probably 6,000)	Chidibbia PZ	—	*C.* 1344 + 14872	
415.	—	4,000+	Sicilibba PZ	—	*C.* 25823	
416.	—	4,000	Verecunda ■	—	*C.* 4253	
417.	(Lettering 11 cm)	3,200	Celtianis ■	—	*ILAlg* II, i, 2109	
418.	(Lettering 10 and 8 cm)	3,000	Celtianis N	—	*C.* 19695	
419.	(In connection with baths built by Memmia . . . Fidiana)	3,000	Bulla Regia PZ	Septimius	*ILAf* 454b	
420.	List of figures	2,318/21	Simitthus PZ	—	*C.* 25643	

FRAGMENTS AND OUTLAYS (*cont.*)

	Identification	*Price (HS)*	*Town*	*Date*	*Reference*	*Notes*
421.	List of figures	2,000	Lambaesis N	—	Musée de Lambèse 1232 (unpublished)	
422.	—	1,000	Thugga PZ	—	*C.* 26631	
423.	List of payments	600/300 (?000)	Karthago PZ	—	*C.* 24615	
424.	List of payments	120/49½	Karthago PZ	—	*ILTun* 896	
425.	List of payments by communities including 'Zamenses,' 'Vazaritani' and 'Mizoterenses'	65½/15	Karthago PZ	—	*C.* 12552	
426.	List of at least 31 payments	HS8/½	Tiddis N	—	*ILAlg* II, i, 9624	

[36] Gsell suggests a Severan date for this building on the ground that its donor is described as H(onestae) M(emoriae) V(ir), an appellation not found before the third century, according to Hirschfeld (*Kleine Schriften*, p. 680). For two reasons I think a date slightly before the beginning of the third century the most likely: from evidence cited on pp. 58–59 it appears that Lambaesis and its neighbouring cities were subject to heavy inflation in the early third century; if the Capitol is dated to this period also, its relatively low cost (see forthcoming article on African construction costs) conflicts with the other evidence. Secondly, if it had been erected after 197, when the phenomenal series of dedications to the Severi began (see index, 'Imperatores,' in *CIL* VIII, supp. 5, fasc. ii), it would be extraordinary to omit the emperor's name from the dedication, this being a building of the greatest importance and prestige-value. Such an omission would, on the other hand, have been quite possible during the uncertain period from 193–197, when the uneasy collaboration between Septimius Severus and Clodius Albinus (ended by Clodius's defeat in 197) can hardly have given provincials [illegible] trust in the permanance of the regime. I have therefore tentatively dated the building to 193–197.

See Gsell, *Monuments* I, pp. 143–145, pl. XXIII and fig. 5; *BCH*, pp. 163–165.

[37] The ground measu[illegible] of this temple (excluding peribolos) are approximately 7m90 × 15m30, from the survey made in 1946 by C. Cata[illegible] (Unpublished. I am obliged to Mr. M. H. Ballance for a copy of the plan.)

[38] Dated to 185–192 by L. Poinssot in *NAM* xviii, 1910, p. 95. Poinssot, *Dougga*, no. 5.

[39] Two figures are mentioned in the inscription: one of HS50,000, which was the amount of the original estimate or promise ('taxatis hs quinquaginta milib. n.'); the second, of HS100,000, is the sum from which the temple was completed. The phrase denoting the application of the second [illegible] ('ad perficiendum id opus'), led Bourgarel-Musso to regard the sum of HS50,000 as a separate earlier contribution. But though there may have been other payments besides the 100,000 (there being a lacuna of ten or fifteen letter-widths), it does not appear that the sum of 50,000 was paid as a separate amount. *C/G*, pp. 82–85 + pl. XXV–XXVII; Poinssot, *Dougga*, no. 10 + pl. VIII–IX; Charles-Picard, *Religions*, p. 158.

[40] For an account of the building see R. Thouvenot, *Volubilis*, 1949, pp. 37–38. Chatelain (who reproduces this inscription as *ILM* 45) restores the figure as 'Ccc' or 300,000, without giving grounds for the improvement. Cagnat proposes no restoration in his original publication, but the photograph of the stone (*Hesperis*, *loc. cit.*) suggests that not two but three digits of the figure are missing. Parallels are too diverse for any sure conjecture to be made about the price, but in general African building prices of more than HS100,000 are in broad round figures, and a cost such as HS400,000 would not be disproportionate as the price of the Capitol of a large town: the Capitol at Lambaesis cost HS600,000 (no. 1).

[41] This price refers to an extensive rebuilding on the site of an earlier and smaller temple: 'templum modicum antiqua vet[ust]ate dilapsum ampliato

spatio columnis et regis duabus picturis ornatum pecunia sua ex ha [xvii] mil. d [*sic*] n.a solo coeptum perfecit. . . .'

[98] Additions to this temple whose cost is not known were made at a slightly later date (*C.* 26470 + *ILTun* 1391). Poinssot, *Dougga*, no. 16; Charles-Picard, *Religions*, p. 160.

[99] L. Poinssot remarks that the design of this miniature semi-circular temple is primitive (*NAM*, xii, 1904, p. 407). He dates it tentatively (by the lettering) [illegible] the reign of Hadrian (p. 413), but whether the dedication was even as late as this is uncertain. For the temple of Fortune (no. 8), built between 119 and 138, definitely infringes im[illegible] on one side (see photo opp. p. 408, *loc. cit.*; the plan in Poinssot, *Dougga*, p. 36, does not show this); and [illegible] seems unlikely that an infraction of this sort would have been made while the two executors of the bequest which provided the smaller temple were still living. Hence a Trajanic or even Flavian date for the building seems quite possible. The earliest surviving evidence for private munificence at Thugga is actually early first-century (*C.* 26598 and *ILAf* 558, both reign of Tiberius), while the earliest dated epigraphic mention of a price in Africa is Vespasianic (no. 3, A.D. 72). See L. Poinssot, *NAM*, xii, 1904, pp. 406–416; C. Poinssot, *Dougga*, no. 5 + pl. VI + fig. 3 (no. 5); F. Benoit, *L'Afrique méditerranéenne*, 1931, pl. XXIX.

[101] This temple [illegible] financed by subscription, a method unusual in Africa; a list on the front wall of the cella gives a series of names and contributions, the average individual sum being HS2,000–2,400. The list is not complete. *C/G*, pp. 104–105 + pl. XXVIII–XXIX.

[illegible] See *C/G*, [illegible]. 68 ff. + pl. V–VI; Benoit, *op. cit.*, pl. LVI.

[103] See L. A. Constans, *NAM*, xiv, 1916, pp. 48–51 + pl. II, VII. Reprinted with same pagination as 'Gigthis. Études d'histoire et d'archéologie [illegible] un emporium de la petite Syrte,' 1916.

[104] See *C/G*, pp. 18–20.

[105] See *C/G*, pp. 82–85 + pl. XXV–XXVII. This temple is quite sizeable, despite the tiny amount first promised, which is our only informati[illegible] about its [illegible].

[106] See pp. 61–62 above.

[107] The two descriptions referring to these baths appear to be respectively foundation stone and final dedication; [illegible] interval between their dates indicates a construction time of seventeen months and fifteen days. No remains of this building are known, but the community, one of the *castella* of Cirta, was probably a small one; the total area of remains extant [illegible] the beginning of this century (without excavation) was 6 hectares, *Recueil*, xl, 1907, pp. 258–259.

[108] Both the inscriptions here mention the price of HS100,000, though they are dated to adjacent years; there may be two buildings in question, but if so, it is remarkable that a small community should have erected two separate buildings of the same relatively high valuation within the space of two years. I have hazarded that there was only [illegible] building and that this was a set of baths, on the analogy with no. 30 which [illegible] from a small community in the same area, is of the same price, and is drafted in a similar way. The absence of a deity here almost certainly indicates that the edifice was functional, not sacred.

[illegible] To deduce the actual price of this arch, something should be subtracted from the total to allow for the two tetrastyles, perhaps a sum in the region of HS60,000, which would leave HS190,000 as the cost of the arch alone (see nos. 93 and 94). See Gsell, *Monuments* I, pp. 180–185 + pl. XLIII.

[110] See town-plan in Y. Allais, *Djemila*, 1938; the foundations of the arch are shown immediately to the east of the theatre, on the road leading towards [illegible] town.

[111] See *BCH*, pp. 297–304 + figs. 140–142 + pl. XXXVIII (written at a time when the inscription revealing the nature of the building had not yet been discovered); H. Pfeiffer, *Mem. Amer. Acad. Rome*, ix, 1931, pp. 157–166 + pl. 16–19, gives restorations of the building.

[112] See Gsell/Joly, *Khamissa, Mdaourouch, Announa*, 'Mdaourouch,' [illegible]. 57–73 + figs. 9–12 + pl. II, III, XVIII.

[113] L. Carton, *Recueil*, xxxix, 1906, pp. 61–65, with 4 plates; Poinssot, *Dougga*, [illegible], 11 + pl. VI. C. Poinssot conjectures that the building (whose inscription is incomplete) was a temple, but mentions no architectural parallels. Thetyl obate (0·45 m.) would be low for a temple, since the building is one of [illegible] size. The four balustraded enclosures in [illegible] centre of the court may perhaps indicate that this was [illegible] kind of market, as Carton suggested.

[114] I am indebted to M. Marcel Leglay for copies of three unpublished price-inscriptions from Cuicul (nos. 50, 104 and 410 of present list) and for kind permission to reproduce them here. The restorations are mine.

No. 50: '[nomen] . . . mus aed(ilis) . . . [quod ob honorem] fl(amonii) p(er)p(etui) ex ha lxx (millibus nummis) p[romiserat? . . .]'; two fragments of a one-line inscription discovered separately, letter-height Om11. Bourgarel-Musso, who refers to this inscription without reproducing it, suggests that it [illegible]y have belonged to the basilica Iulia built at Cuicul by C. Iullius Crescens Didius Crescentianus (see no. 189, *C.* 8318–8319); but since the donor's cognomen apparently ended in 'mus,' this identification cannot be accepted.

No. 104: 'divo M. An[to]/nino patr[i/Imp. Caes./ L. Aeli Aureli/Commodi . . ./. . .]i Aug/ex testame[nto]/C. Anni(i) Ma[. . ./ex] hs xii nil(ibus) n(ummis) . . ./. . . C An[n]i. . ./. . . verissi . . ./. . . f(ecit?) ide[mq(ue) ded(icavit)]. There are no further lines of text; letter-height 0·05m. Statue-base.

No. 410: '. . . adlectu[s in quinque dec(urias)? . . ./. . . qua]m [illegible] hs X m[llibus) [n(ummis) promiserat? . . .]. Fragment of two-line inscription: letter-height Om08.

[115] The inscription, together with an account of the building to which it refers, is given in *BCH*, pp. 317–319 + figs. 148–150. The exactness of the figure is paralleled in African expenditures of this size only by no. 83.

[116] See Y. Allais, *Djemila*, Paris, 1938, pp. 38–40; a small ground-plan appears as part of the general plan of Cuicul. Charles-Picard, *Civilisation*, pl. XIX, p. 83.

[117] The donor of this building, M. Coculnius

Quintillianus, was adlected to the Senate by Septimius Severus.

[114] Dedicated under the proconsulship of L. Hedius Rufus Lollianus Avitus, which is dated to 157–158 by Syme in 'Proconsuls d'Afrique sous Antonin le Pieux,' *Rev. Et. Anc.*, 1959, pp. 310–319. A plan appears in G. Caputo, *Il Teatro di Sabratha*, Rome, 1959, Tav. LXXXX; a description of [redacted] theatre by Caputo appears in *Enciclopedia dello Spettacolo* (S. d'Amico, ed.), Rome, 1959, vol. VI, pp. 1410–1411 + tav. CXCI; and a monograph on the theatre by Caputo is forthcoming.

[115] This sum was subscribed for the mosaic of the baths by some of the decurions ('pleriq(ue) decuriones'); the rest of the cost of restoring the baths was paid with public money. Their remains have been built over, and their size has not been given in any publication; but a rough guess at the area of mosaic that they are likely to have contained can still be made. Public baths were also built in the 260's at Thugga, a nearby town identical status: both cities became municipium under Septimius and colony under Gallienus. The area of mosaic in the baths at Thugga was approximately 640 sq. m., as far as can be deduced from the plan and verbal indications in Poinssot, *Dougga* (no. 15 + pl. XI, XII, XIII + fig. 5) and from the indications of L. Poinssot and R. Lantier in *BAC*, 1925, pp. xxix-xxxi. If the comparison is of any value, it may suggest a mean price of the order of HS70 per square metre of mosaic.

[116] As well as the substantial decorations contributed to the arch by the relations of the original donor (which cost HS25,000), the city added a quadriga to its adornment.

[117] Leschi (p. 229) points out that the dedication to the Genius coloniae from which this gift is known is not itself mentioned as part of the outlay, but since the base on which it is engraved is too shallow to have been used as support for a statue, its cost would have been a negligible part of the large total outlay. (Nos. 392 and 393 show the prices of statue bases by themselves as HS500 and HS400.)

[118] These statues, the statues in no. 189, the *basilica Iulia* at Cuicul, whose price is not known, and half of the price of an arch (no. 36) were given by C. Iulius Crescens Didius Crescentianus, a knight of the reigns of Antoninus and Marcus who held all the honores at both Cirta and Cuicul.

[119] In terms of the Septimian debasement, assuming this as a mean 50 per cent. (see Table III), the bullion value of this statue would have been HS115,000 odd. An inscription from Formiae in Italy gives HS100,000 as the price for a [redacted] of a chariot of Minerva which was to contain 100 pounds of silver (*ILS* 6282). If the metal in the Formiae gift was valued in terms of the debasement of Marcus (25 per cent.), though the inscription may be earlier, the money-value of the silver would have been less than HS55,000. This suggests that in this instance at least, workmanship had a cost practically equivalent to that of the metal used. Hence some substantial amount should be added to the figure in the Lepcis inscription to give [redacted] indication of the overall cost of the statue, which is the most expensive of those known in Africa.

[120] Part of the cost of this statue was provided by the city (HS12,000), the rest being the contribution of the donor, an unusual procedure, but *cf.* note 125.

[121] This statue was financed from the summa honoraria of the flamen charged with its erection (HS12,000) together with some unspecified amount of public money; the base was provided by the flamen from his own resources. The financing of statues from three sources is unusual.

[122] This statue was erected from a bequest of HS8,000, from which the 5 per cent. inheritance tax was subtracted, leaving 7,600, to which 9,000 was added by the three freedmen of the donor, presumably contributing 1,000 apiece.

[123] The statue was erected from the will of the father and two brothers of the man in honour of whose flaminate it was dedicated. Since the price is the unparalleled figure of HS9,000, it is likely that it resulted from equal contributions by each of the three testators (*cf.* preceding note).

The dedication of this statue was accompanied by the giving of 'sportulae duplae' to the decurions (probably HS8, see note 147), and the sum of HS120 to each of the curiae for an unspecified purpose; whatever this was, the natural level of generosity to each curialis would perhaps have been half the sum given to the decurions, *i.e.* HS4 (*cf.* Thuburbo gift for distribution to decurions and curiae, p. 74). If this was so, the number of members per curia would have been thirty at Verecunda. This is much lower than the figure of 100 inferred elsewhere (see pp. 73–74 above), but Verecunda was possibly still no more than a vicus at this date (A.D. 213; Broughton, p. 202). Thirty is a total authenticated for the number of decurions at one Italian and probably at one Numidian town (see above, pp. 70–71).

If, on the other hand, the figure of HS120 per curia was arrived at by calculations on the basis of the 10 asses per man deduced elsewhere (see above, pp. 74–74), this would suggest 'half-size' curiae of approximately fifty members each.

[124] A false duplicate of this inscription appears as *C.* 5295 (rescinded in a later supplement to the same volume, p. 1685). Liebenam (p. 57) inferred from the inscription a figure of HS600,000; but the context makes clear that the amount was no more than 6,000 odd, though the figure is stated as $\overline{\text{VI}}$CXL. A similar abuse of the bar over numerals occurs in no. 404, where an amount given as '$\overline{\text{IIII}}$ D N' is either an addition to or component of 'HS $\overline{\text{XX}}$ N,' and [redacted] clearly must signify [redacted] although the literal [redacted] is 497,000. No. 160 provides another example: a figure from the financing of a statue which must be HS1,800 is stated as 'HS IↃCCC.' The inconsistency may have arisen from the confusion of two conventions of numerical notation. According to one, the bar over the letter showed that the symbol was numerical, as in 'IIVIRO' (*ILAlg* I, 1295). The second practice was that shown above, of using the bar to indicate figures multiplied by a thousand.

[125] See note 53.

[126] See L. Renier, 'Le Tombeau de T. Flavius Maximus,' *Revue archéol.*, 1850, pp. 186–187, pl. CXL.

[127] The gift of P. Licinius Papirianus, *procurator a rationibus* under Marcus and Verus. The other Roman alimentary schemes whose rates are known

are the private scheme at Tarracina in Italy, whose rates were HS20 and HS16, exactly double those at Sicca; and the governmental scheme known in Italy under Trajan, whose rates were HS16 and HS12 per month, also considerably higher than the Sicca allowances, though half a century earlier (*ILS* 6278 and 6675). *CIL* II, 1174 (Hispalis) gives one of the rates of a supplementary alimentary scheme.

[138] This was part of a gift by L. Aemilius [Frontinus], proconsul of Asia, which also included a temple dedicated to the Genius of the colony of Oea.

[139] The total value of this gift was probably more than HS700,000, its other components being [illegible] 32 and 382. The donor was C. Cornelius Egrillianus, praefectus leg. XIIII Geminae. See p. 58.

[140] See Appendix, p. 113.

[141] See Appendix, p. 114.

[142] See Appendix, p. 113.

[143] See Appendix, p. 114.

[144] See Appendix, p. 114.

[145] See Appendix, p. 114.

[146] See Appendix, p. 113.

[147] See Appendix, p. 115.

[148] See Appendix, p. 115.

[149] See p. 63.

[150] This outlay may well have provided a single feast for the curiae, for the figure as revealed is somewhat below the annual cost of feasts at Uthina, Abthugni and Mactar (HS3,000–2,400 for the whole occasion), and the increase may have made it a sum of this size (see [illegible] 272, 275, 276).

[151] An inscription from Cirta suggests compensation to the donors of munera [illegible] amphitheatre in the form of box-office returns: 'statuam quam promisit [illegible] reditibus locorum amphitheatri diei muneris quem . . . edidit' (*ILAlg* II, 1, 560, probably Septimian). The procedure followed here may have been only a peculiarity of the arrangements made by the individual concerned; but it would be curious to forfeit the goodwill created by a free entertainment by imposing an entrance fee, if the practice was not an established one, especially since the donor [illegible] sufficiently well provided to be able to devote the funds so acquired to [illegible] further outlay, the statue from whose base the text comes. But it need not follow that the figures that have survived for games are less than the actual cost; for the full price could well have been quoted for the sake of effect, even if the donor did [illegible] bear the expense unaided.

[152] It is interesting that the same budgeting, HS2,000 per day, is found in the provision for IIviral games in the Caesarian charter of Urso, probably at least two centuries earlier (*ILS* 6087, cap. 70). Each IIvir was [illegible] contribute at least HS2,000 of his own money, and was allowed a subvention of up to HS2,000 of public money, for four days of joint g[illegible] Their estimated total cost was thus HS8,000.

[153] The account given of the sportulae is: 'fl(amini)b(us) p(er)p(etuis) aureis singulis et honor(ibus) functis duplis et cond(ecurionibus) sed et curial(ibus) sportulis datis.' 'Sportulae duplae' and '(singulae)' almost certainly indicate rates of 2 and 1 denarii per man, for the single denarius is the commonest known African sportulae-rate (see nos. 290–305), and was an obvious rate for distributions, since it meant a single silver coin per man. The 'double' rate probable here, HS8, is explicitly found in one instance at Auzia (no. 296). (Another Lambaesis inscription, *C.* 2711, of the reign of Septimius, contains the identical formula 'datis sportulis condecurionibus suis et honorib(us) functis duplis'; a Verecunda inscription of the reign of Caracalla, *C.* 4202 + 18494, mentions 'sportulae duplae.') Hence [illegible] tariff here is HS100 to the flamines perpetui, HS8 to those who had held magisterial office, and HS4 to the remainder of the decurions, and presumably to the curiales also. Discrimination by so large a factor is not paralleled in Africa, but a donation at Bovillae in Latium shows a similar range (rates of HS100, 20, 12, 4, *CIL* XIV, 2408; sportulae of HS100 are also found at Forum Clodii in Etruria, *ILS* 6584). There appear to be no parallels in Africa for giving the flamens preferential treatment in distributions, though we find that they take precedence over the magistrates in the Album of Thamugadi of the mid-fourth century (Leschi, p. 246 ff.). In the Lambaesis inscription, which is probably third century, the highest sportula is described [illegible] an aureus, meaning the gold coin of this name, instead of being given in the usual denarii or sesterces, as is the case in the two Italian inscriptions referred to above, both of which date from the 160's. Hence the favour shown to the flamens here was probably even more extreme than the nominal ratios suggest; for the aureus still retained its purity and its customary [illegible] to the denarius of 1:25 under the Severi, despite the heavy debasement of the silver coinage by this period (Table III), and it was thus under-priced in terms of the silver currency. By the reign of Caracalla it had become a favour for a soldier to receive payment in gold currency, clearly because this now possessed a real value higher than its money value (see A. H. M. Jones, *Econ. Hist. Rev.*, 1952, p. 297). Aurei are also found as a donative in no. 309, where they were apparently given to various groups as collective sportulae, perhaps to be exchanged and divided among the members.

[154] See note 69.

[155] This probably implies a minimum free male adult population of 4,000 at Siagu.

[156] The knight responsible for this unusual generosity, M. Amullius Optatus Crementianus, was also donor of a building at Thagaste, whose cost was HS300,000 (no. 39).

[157] It has been convincingly shown by S. Lancel in *Libyca*, vi, 1958, pp. 143–152, that the *gymnasia* common in African inscriptions were not athletic displays, but distributions of oil as an unguent for use after bathing: the Theveste 'gymnasia' (no. 320) took place in the baths, as was probably the usual practice.

An inscription from Tuficum in Umbria (*ILS* 6643) gives a price for oil of 4 asses, [illegible] HS1, per Roman pound (following Burcheler's interpretation, *Rhein. Mus.*, 1902, p. 325). Since it was sold at this rate as a public service at a time of 'karitas olei,' the price may well have been a fair one in normal conditions. If the same price prevailed at Theveste under Caracalla, the amount provided per day would have been 195 Roman pounds of

oil, or about four tons per year (there were distributions on sixty-four days of the year, no. 320).

[183] Leschi suggests that the figure of HS21,200 paid in honour of the augurate represents the summa honoraria for the office (Leschi, p. 231). On that assumption he interprets the financial details of an inscription (*AE*, 1941, 49) from which nos. 160 and 337 come, which mentions the payment of the legitima for the augurate without revealing the amount, and infers a total payment in this case of HS32,000 (4,800 + 6,000 + 21,200). This ingenious conjecture cannot be accepted, for the cost of the statue involved was not initially calculated at 4,800, and only reached this level through an addition to the original promise, perhaps because of a mason's bill larger than had been expected. This undermines the arithmetical argument for inserting the payment of HS21,200 as the legitima for the augurate; further arguments against equating this ob honorem payment with the fixed charge for the office are given on p. 66 above.

[184] See p. 67 above.

[185] See note 52 above.

[186] Haywood, following Bourgarel-Munso, quotes a phantom summa honoraria of HS10,000 for the IIvirate at Hippo Regius, giving as authority *ILAlg* I, 10. This inscription mentions only one fixed charge, which apparently refers to the quinquennalitas.

[187] 'This figure may represent a valuation of the treasures in the incomplete list which [illegible] 'synopsis, Iovis [*sic*] victor argenteus in kapitolio' (*ILAlg* II, i, 489); or it may refer to other bullion resources in the Capitol at Cirta. The two texts are not necessarily coeval, and their most recent editor, M. Pflaum, does not relate them. The Cirtan Capitol was very much the largest of those in Africa whose ground-plan is known; [illegible] plan in *BCH* (p. 162) suggests a span from outer wall to outer wall of the two lateral cellae of more than 100 m.

[188] See p. 69.

[189] See p. 64.

[190] This is the only explicit African wheat price. The nature of the benefaction and the figure itself make clear that it must belong to a period of chronic famine or dearth. The inscription does not appear to be later than the first third of the third century A.D. Haywood (p. 44) assembles the evidence for corn shortage in Africa. HS2–4 per modius was a common level for wheat prices in other parts of the Empire, and it is unlikely that the normal price in the largest corn-growing area in the Empire would have been higher than this. See A. H. M. Jones, *Econ. Hist. Rev.*, 1952, pp. 295–296; Heichelheim (*Econ. Survey*, iv, p. 181) mentions a Palestinian average of HS2 per modius; also *RE* vii, cols. 145 ff. (Rostovtseff).

[191] The bulk of stone necessary for carving this marble vat would presumably have been as large as the maximum dimensions of the vat, *i.e.* about two-fifths of a cu. m. It is unlikely that the ordinary statue would have used, at most, more than three times this quantity of rough marble, and the price of its raw material on this scale would thus have been less than HS600, allowing for the cost of carving the vat. This strongly suggests that the bulk of the cost of ordinary marble statues lay in the workmanship, though marble prices would depend upon the availability of the stone, and the distance of the marble quarry from the town. The average statue-cost was HS4,000–6,000, usually with the base (see p. 62), and bases cost by themselves HS400 or 500, see nos. 392–393.

[192] The second line of this inscription is given in *ILAf* 222 as '[di]e pollicitationis [illegible] mil [n. .].' It can perhaps be restored thus: '[(nomen) templum? quod ex [illegible] promiserat, item di]e pollicitationis ss cc mil [m. reipubl. inlatis, ampliata pecunia? posuit].'

The figure comes from a fragment of a three-line frieze, with lettering 9 and 7 cm. high. Large-scale building such as this implies was rare in the mid-third century, but Abbir Cella was one of the few cities which obtained an advance in status at this period ('Municipium Iulium Philippianum,' *C.* 814). At Thugga, the substantial baths also erected under Gallienus (with which [illegible] 323 is probably connected, L. Poinssot and R. Lantier, *BAC* 1925, p. xxviii ff.; Poinssot, *Dougga*, no. 15) coincided with the city's promotion to colony (Romanelli, *Storia*, p. 486). At Thibursicum Bure the baths [illegible] elaborately restored in 260–262, just before [illegible] identical advance in status given by the same emperor (*ILAf* 506, no. 64; Romanelli, *loc. cit.*).

[193] Much of the inscription has survived, but it has not been effectively restored. It is clear that a number of donors contributed funds towards the temple, though the main erection was carried out in the name of one man. Neither of the two figures seems to refer to the basic construction cost. A foundation for sportulae to the decurions and for ludi scaenici as mentioned, and the figure of HS60,000 may perhaps refer to this (the figure would be very plausible, *cf.* nos. 260, 261); the smaller sum may refer to the cost of silver statues of the goddess Caelestis, but neither of these attributions is certain (*CIC*, pp. 25–30 + pl. XI–XIV; Poinssot, *Dougga*, no. 10 + pl. VIII–IX).

RICHARD DUNCAN-JONES

APPENDIX

The interpretation of some foundation inscriptions

No. 251. On the basis of available parallels (see pp. 71–72 above) it is likely that the ordo was one of 100; at the stated sportulae-rate of HS20 per man, the decurions would thus have absorbed HS2,000, leaving HS8,000, assuming that the interest on the capital of 200,000 at the normal 5 per cent. (see note 44). Thus HS8,000 would have been available for the games on the donor's birthday, apparently a single day's entertainment.

The crucial phrase of the inscription is '. . . [hs] . . . I. N. LEGAVIT ITA VT EX [usuri] S. SESTERTIORVM DVGENTORVM [*sic*] MIL. . . .' Mommsen takes it that the complete figure here represents the yield, the principal implied being HS4 million, at 5 per cent. I follow Schmidt, who also comments in *CIL*, in reading HS200,000 as the principal, not the income, for two reasons: the largest certainly monumentified gift found in Africa (no. 248) has a value less than one-third of the value which M.'s reading supposes: it is difficult to accept an amount as phenomenal as this at an obscure town on the basis of an inscription whose main figure is lacking. Secondly, if HS200,000 is read as the annual income, it necessitates a huge figure for a single day of ludi scaenici at a town which was not large as far as is known; the price for a full-scale amphitheatre show with gladiators and panthers at Carthage, a city many times larger than Thisi, was almost certainly less than this (no. 281).

The phrasing of the inscription nonetheless implies that the total bequest was larger than the sum of HS200,000 for games and sportulae; but the gift was perhaps in part a capital payment without stipulations, like no. 323. The symbol which survives from the main figure in the inscription is more likely to belong to a number such as $1\overline{X}1$, or one million, than a number ending in I.

No. 256. The inscription gives an apparently complete account of the provisions of a foundation set up by bequest, together with an eccentric statement of the interest-rate, 8 per cent.; the figure for the principal is missing, but can be inferred from the list of annual expenditures: twice-yearly circus-games with a total annual cost of HS1,080; twice-yearly sportulae of 1 denarius to each of the decurions and to two clerks, making a further HS816 (if there were 100 decurions); twice-yearly sportulae of 2 denarii to the wife and two nieces of the donor, and a twice-yearly outlay of 3 denarii for the ceremonial decoration of two statues, making a further HS72. The consequent total of HS1,968 per year at 5 per cent. necessitates a capital of HS39,360; this is close enough to suggest a bequeathed sum of HS40,000, a foundation-value which is also found at Siagu (no. 259). The surplus, if this were (1¼ per cent. of the annual yield), was probably a marginal consequence of inefficient calculation, rather, of preference for round-figure totals, though it could possibly imply an ordo somewhat larger than 100, the surplus being enough to provide sportulae for eight more decurions.

I have followed Mommsen in reading the interest rate here as 5 per cent. The text is '. . . quae s[u]mm(ae) fenerantur n(ummis) xx menses quosque asses octonos,' which M. construes as meaning interest amounting to HS20 per year (on 100 denarii or HS400) at the rate of 8 asses (HS2) per month. He reconciles the disparity between the co-ordinates by inferring that the calculation was made on an assumption of ten months to the year, 'quam computationem antiquissimam vel saeculo tertio in Africa in usu fuisse sane memorabile est.' However, there is a similar instance of very old-fashioned usage in an inscription from Saldae, another town of Mauretania Caesariensis, of the reign of Marcus or later: this describes the distribution of sportulae whose amount was calculated in *victoriati* instead of the system of denarii, sesterces and asses usual under the Principate (no. 297).

Billeter rejects M.'s interpretation, which is difficult to dispute if the text is accepted as it stands, in favour of restoring the figure for the annual rate of yield as N(ummis) XXIV or XXIIII, which allows the usual number of months, and so converts the interest rate from 5 to 6 per cent. (*Geschichte des Zinsfusses*, 1898, p. 226, followed by Gsell, *HAAlg* I, 3107, and Haywood, p. 80). There are two arguments against this emendation: 'XX' is a certain reading, and according to the version of the text given in *CIL* (*C.* 9052), 'MENSES' follows immediately, without a gap for further conjectural figures. Since four is usually written in African inscriptions as 'IIII,' B.'s reading would mean supposing an engraver's omission of four symbols. Secondly, if 6 per cent. is assumed as the interest rate, the principal required then becomes HS32,706, a figure difficult to approximate to any sum likely for the capital value of foundation gifts. HS35,000 would perhaps be a possible figure, though it is not known in Africa, but this would involve an annual surplus of 6.29 per cent., almost four times as much as that made necessary by the stated interest-rate of 5 per cent., where the surplus is 1.60 of annual yield, if we allow the very plausible notion that the principal was

HS40,000. The surplus can be inferred in three other foundations, providing an interesting comparison: in the larger Theveste foundation for curial feasts (no. 257=277) it was probably 1 per cent. of the yield; in the Sicca alimentary scheme (no. 248) it was 0.31 per cent. of the yield; while in the Theveste foundation for oil-distributions the probable surplus was 0.16 per cent. Hence in the Auzia foundation inscription 5 per cent. is the preferable reading for the interest-rate, both because it is stated in the text, and because it makes better sense than 6 per cent., on internal evidence.

No. 259. The inscription is incomplete, but plainly refers to the setting up of a foundation for a single day of games to be held annually: the financial details of this are missing, but those of the non-recurrent celebration with which the inauguration of a statue of the donor was to be marked have survived: HS6,000 was to go on three days of games, whose cost was probably therefore estimated at HS2,000 per day, and a residue of HS4,000 was to be distributed to the citizens at the rate of one sestertius per head (nos. 286 and 305). If, as is very likely, the cost of games was estimated at the same rate throughout the terms of the benefaction, HS2,000 would therefore have been needed for the single annual day of games, necessitating a capital of HS40,000 at 5 per cent., and so a total bequest of HS50,000. This is a plausible figure, of which there are ten other instances among the African gifts (nos. 13, 78, 85, 91, 255, 256, 257, 306, 323, 401).

No. 261. The inscription, of which only a fraction of each line survives, seems to indicate a foundation of HS25,000 for sportulae, for which a statue was being erected in gratitude by the pagus at Thugga, whose decurions the foundation therefore probably benefited. This may be a companion donation to no. 260, a foundation of the same value for sportulae to the decurions of the native community at Thugga, the civitas, given in connection with the building of the temple of Mercury (no. 4). Since sportulae were given to the decurions of both ordos at the dedication of this temple, it is clear that the donors (Q. Pacuvius Saturus and Nahania Victoria) did not confine their munificence to one half of the community.

No. 262. In order to construe the details of this foundation intelligibly it is necessary to emend one word of the text; when this has been done, the financial details fall into place with almost complete exactness. HS22,000 was bequeathed for the recurrent erection every seven years of a statue of the donor at a cost on each occasion of HS3,200 (no. 188); the dedication was to be marked with the distribution to the decurions of sportulae of HS20, and, according to the literal reading, HS240 to each of the curiales, 'epulationis nomine.' Mommsen attempted to explain the disproportion here by suggesting that the donor was showing especial favour to the members of the single curia to which he had himself belonged; but the text says 'curialib(us),' not 'concurialib(us)'; and there are few parallels for the subversion of precedence that would be implied in a public benefaction that favoured curiales above decurions.

The yield of HS22,000 at 5 per cent. for seven years is only 7,700, of which 2,000 would have been absorbed by the decurions (100 being the usual number, see above, pp. 71–72), and 3,200 by the cost of the statue; hence HS2,500 remained, which, according to the text as it stands, would have sufficed for only ten curiales (HS2,500 divided by HS240), which is hardly credible in itself. But ten was a usual total for the number of *curiae* per city (see p. 73 above), and HS240, the amount apparently assigned here to each curialis 'epulationis nomine,' is in fact very close to the sum allowed [redacted] each *curia* in three other foundations where the price for an 'epulum' is deduceable (nos. 274, 275, 277). Hence 'curiis' is a much more satisfactory reading than 'curialib(us).' (Calculations on the basis of the other possible interest-rates, 6 and 12 per cent., produce odd numbers of curiae or curiales whichever reading is adopted.)

It may be that the surplus of HS100 at each yield which remains unaccounted for, if there were exactly 100 decurions, actually went to the cost of the feast for the curiae: for this is exactly enough to raise the amount spent per curia to the level of HS250 (nos. 274, 275). HS240 ('denarios sexagenos') is stated in the inscription as the amount given to each curia, but the total of 62½ denarii (=HS250) would probably have been eschewed on grounds of clumsiness, granted that the synopsis was being given in denarii at this point (sportulae of 5 denarii per head are specified for the decurions); and the engraver of this relatively concise text, who was at fault in one instance, may also have considered the individual sum of 2½ denarii an unwieldy trifle which he could safely omit. Even in more distinguished contexts, there is little evidence of literal financial truthfulness in the African price-inscriptions, almost all of which give figures in thousands or tens of thousands, although builder's accounts rarely produce such streamlined results.

No. 263. The yield allowed here by the usual interest-rate of 5 per cent. is HS600 per year; if we suppose a sportula of HS4 (lower rates being very poorly evidenced, nos. 303–305, and the income being too small to allow a higher one) the amount left for oil ('gymnasium,' see note 151) for the people would be HS200, allowing the normal ordo of 100 decurions. This would be a very generous oil-distribution for a civitas whose remains (and foundations, also nos. 266–267) suggest a small town; for the rate at Theveste, a much larger place, which had become a municipium by the time of Trajan, and was the centre of a procuratorial district (Gsell, *AAA*, fc. 29, 101), was only

HS195 per occasion by the provisions of a very lavish gift of the reign of Caracalla, on an enormously larger scale than the Gor foundation (no. 320). This provides a case for reading ▬ ordo of 100 decurions whose benefits were shared by an annex of twenty-five praetextati; for this is the number listed at Canusium, which probably existed also at Sufes (see above, pp. 71–2). This brings the rate for oil down a much more plausible HS100 per occasion, and is also supported by the fairly late date implied by the omission of a tribu from the inscription; for the inclusion of the praetextati in gifts to the decurions was probably a late innovation (*cf.* Abthugni gift, which may be late Antonine, where they do not appear, no. 262, p. 114 above).

No. 264. This foundation was to yield quinquennially: 'ex cuius summae usuris quinsto [*sic*] qu[oque an]no semper univ[ers . . .].' (Read ■ ▬ indication of 5 per cent. interest by Haywood, p. 82, but *cf.* no. 262.) If we assume 5 per cent. as the interest-rate (see note 44), the yield would have been HS2,750 every fifth year. The purpose was clearly ■ distribution, either to 'universis civibus' (or 'universo populo'), or 'universis curiis.' There are only two examples of foundations primarily intended for distributions to the people, and both are of great size (nos. 249, 250); there are, on the other hand, four examples of foundations intended for feasts for the curiae, of which three are very close to this in size, allowing for the fivefold difference in frequency of yield (nos. 254, 255, 257, 268). This is thus more likely to be the type of benefaction here. At a town as important as Hadrumetum so small ■ foundation would scarcely have been intended for ▬ than one purpose; I have assumed then that the intention was to provide feasts for the curiae. Neither the principal ▬ the likely amount of the quinquennial yield ▬ figures of accustomed roundness (11,000 and 2,750); yet they were probably chosen advisedly. They suggest ■ provision for eleven curiae, a conjecture supported by the amount of the payment to each curia that this involves: HS250, which is also the probable figure in ▬ 275 and 276 (= 262, see p. 114); nos. 273 and 277 have amounts close to this. Eleven curiae are explicitly known at three other towns in Proconsularis, Thuburbo Maius, Theveste and Lepcis Magna (see p. 73 above).

No. 265. It is unlikely that the sportulae-rate would have been lower than HS4 per man (see nos. 290–305), and since Uchi ▬ now a colony, the ordo ▬ hardly have been less than 100. The sportulae thus account for HS400 of the income, if the interest-rate ▬ ■ per cent., leaving only HS100 for games. The slenderness of this provision provides an argument for supposing a higher interest-rate here: 6 per cent. (no. 267) would increase the games allowance to HS200, 12 per cent. (no. 268) to HS800. This maximum is still low compared with the explicit games prices that have survived (nos. 281, 284, 286).

No. 268. The provision here is only for the fellow-members of the curia to which the donor himself belonged, ▬ for all the curiae in the city, as in other feast foundations. The apparent annual amount (HS288) may actually be an approximation to the figure of HS300 per curia found at Uthina (no. 272), which allows a possible 12 asses per man (p. 73 ff. above). For the capital is stated in denarii, the sum being the round figure 'denarii sescenti' or HS2,400; a yield of HS▬ ▬ the stated interest-rate, 12 per cent., would have needed the irregular capital of 625 denarii. It is possible that this was the amount given by the donor, and that the yield was HS300, the figure being regularised in the inscription. See remarks on no. 262 above, p. 114.

ADDENDUM (see pp. 73–4 above)

The size of the curiae. Evidence that has recently come to notice suggests that the hypothesis of 100 members per curia (p. 73) is ■ considerable over-estimate. An inscription from Thamugadi (*CRAI* 1947, p. 95) shows a dedication made in 211–2 by the *curia Commodiana*; on either side of the base are engraved the names of the 'curiales cur(iae) Commodianae.' There are 52 ▬ in all, the 12th being that of the current *magister*. Since the inscription dates from a period when civic affairs in Africa were still well-ordered, it ▬ safe to take this figure as an indication of standard curial numbers, or something very close to them. Totals of 60 and 54 are found in Italy as the membership of funeral colleges at full strength (*ILS* 7213, l. 5; 7215a, l. 7); there are also strong resemblances between the rules of the African curiae and those of the Italian funeral colleges (*cf. ILS* 6824 and 7212).

R. D.-J.

CAPENA AND THE AGER CAPENAS

(Plates XXIV—XLIII)

PART I

I. INTRODUCTION

The ancient Ager Capenas occupied the elongated triangle of land north of Rome enclosed by the line of the Via Flaminia, M. Soracte and the lower Tiber valley. The study of the archaeology and topography of the area, like that of the Roman Campagna as a whole, has been subject to great fluctuation of interest and emphasis. It was begun, in effect, by the antiquarians of the last century such as Dennis, Nibby and Gell. Then in the early years of this century Ashby took up the subject with an enthusiasm and application that quickly made him the undisputed authority. Since then interest has varied and no general revision of Ashby's topographical scheme has been attempted.

Archaeology in the more general [redacted] of the study of the ancient inhabitants of an area from the remains of their civilisation has made little progress in [redacted] remote corner of the Campagna like the Ager Capenas, partly because of its inaccessibility, and partly because there has been no excavation to speak of and because the material

visible above ground is so very limited both in variety and quality. There is, however, another side to the coin. The density and history of ordinary, everyday settlement, derived from the close observation of sites on the ground, are aspects of classical topography that are only now beginning to be exploited; and it is in an area such as the Roman Campagna that the greatest opportunities exist not only because the density of ancient settlement was very great, but also because such a high percentage of the material has survived. The British School's current programme of topographical survey in Southern Etruria is designed to collate a permanent record of as much of this settlement as possible before all trace disappears.[1] The results will eventually produce a detailed picture of Etruscan and Roman settlement from Civita Castellana to Rome and from the M. Cimini to the Tiber, in fact, almost the whole of Etruria Tiberina.[2]

The topographical method has its unavoidable limitations, notably in the imprecision of any chronological conclusions based solely on the collection of surface material, an imprecision which is in this case accentuated by the gross lack of reliable information about the chronology of the basic pottery-types circulating in Central Italy. In the Ager Capenas one of the outstanding questions centres round the date at which the decentralized ridge settlement familiar in the Roman period began to replace the nucleated settlement—the *pagus*—which survived from the Etruscan period. An attempt to sketch an answer to this question has been made by the excavation of a small Roman site on a ridge north-west of Capena. The results of the excavation will be included in the second half of this report, which for reasons of space is divided between two successive volumes of the *Papers*. The area covered in this first half of the report included the southern and central Ager Capenas as far north as the slopes of M. Soracte.

The survey of the Ager Capenas was undertaken during my tenure of the Rome Scholarship in Classical Studies, 1959–61. I would like to express my gratitude to the Faculty of Archaeology, History and Letters of the British School at Rome and to the other benefactors who insured the completion of the project, Mr. A. W. Lawrence, the Craven Committee, Jesus College, Oxford, and the Committee for Advanced Studies, Oxford. Individually my thanks are due first to Prof. I. A. Richmond and the Director, Mr. J. B. Ward Perkins, who suggested and encouraged the subject. On many points I have had the advantage of discussions with Miss Joyce Reynolds, Mr. M. W. Frederiksen, Mr. A. N. Sherwin-White, Dr. S. Weinstock and the Assistant Director, Mr. M. H. Ballance. The members of the Superintendency for Southern Etruria gave valuable help throughout, especially Professor Bartoccini, the excavator of Lucus Feroniae.

The pages that follow, however, depend as much on the feet as on the head. Of the friends who helped me in the fieldwork during the last three years I owe a special debt of thanks to Mrs. A. Kahane, Mrs. Betty Eastwood (who also provided information on the geological problems of the area), Mr. C. M. Daniels and Mr. A. Birley. Among the many others I mention only some of the more assiduous: Miss

[1] For previous reports, v. *PBSR*, xxiii, 1955, p. 44 ff., xxv, 1957, p. 67 ff., xxvi, 1958, p. 63 ff. and xxix, 1961, p. 1 ff. Ashby's topographical scheme for the Ager Capenas was published in *Atti della Pontificia Accademia Romana di Archeologia: Memorie* I, ii, 1924, pp. 129–175 (hereafter referred to as Ashby, *Memorie*).

[2] v. p. 122.

P. Dorrell, Miss M. Medd, Signorina L. Valentini, Mr. I. J. Blakey, Mr. P. Winchester, Mr. and Mrs. J. Stevenson, my parents, and Signorina M. Braccialini who typed the manuscript. To all these friends and to the *contadini* who enlivened many a day in the field I owe a personal debt of gratitude.

In view of the very large number of sites to be incorporated in this report the site-lists in Section IV are given section by section. Furthermore, to avoid the constant recurrence of six-figure map references in the main text, each site has been given a separate number of its own. The serial numbers appear on the site-maps and also in the site-lists, together with the appropriate six-figure map reference.

The maps referred to are those of the 1 : 25.000 Carta d'Italia, prepared by the Istituto Geografico Militare. The sheets in question are:

143 I NE Civita Castellana
144 III NE Passo Corese
144 III SO Casale Marcigliana
144 III NO Castelnuovo di Porto
144 IV SE Montopoli di Sabina
144 IV SO Rignano Flaminio
144 IV NO Stimigliano

The N–S line dividing grid-square TG (to the left) from square UG (to the right) passes just east of Ponzano and just west of Lucus Feroniae; but since the total width of the area described is far less than 100 km., there is no risk of reduplication and in giving the map references the prefixes TG and UG have been omitted throughout.

The following abbreviations are used in the lists of finds:
terra sig. = *terra sigillata*
dol. = dolium
amph. = amphora
B.T. = brick and tile (By 'tile' flanged tile is always meant, curved tile being mentioned separately.)
op. sig. = *opus signinum* (the conventional, though technically incorrect, term for the waterproof cement frequently used in cisterns.)
op. spic. = *opus spicatum* (the miniature bricks laid on end in a herring-bone pattern to form flooring.)
op. ret. = *opus reticulatum*. The presence of reticulate tufelli on a site shows that part of the original structure was in *opus reticulatum*.
op. sect. = *opus sectile* (small shaped paving tiles of coloured marble or stone).

II. THE HISTORICAL AND TOPOGRAPHICAL BACKGROUND

(*a*) *Etruria Tiberina and Capena*

The site of Rome lies in the middle of an eroded plain that, in effect, forms a broad saddle in the volcanic plateau between the Monti Sabatini and the Monti Albani. This geographical unit extends from the coast to the Monti Sabini, thirty-three miles inland, and runs along the coast north-west of Rome towards the Monti della Tolfa and south as far as Anzio and Cisterna di Latina on the borders of the Pomptine marshes. Practically the whole plain consists of a covering of volcanic tufa through which the Tiber has cut down to the Eocene clays beneath.

In Pleistocene times a trough formed between the Appennines and the Latin hills, part of the anti-Appennine chain, in which the waters of the inflowing streams collected and formed a lake extending as far inland as M. Soracte. An outlet, now followed by the lower section of the Tiber, was formed across the saddle between the

two most southerly volcanoes, Bracciano and Albano, beside the present day M. Gianicolo. The Tiber has since eroded the bed some 150 ft. below its former level and radial streams from the cones on either side have further dissected and lowered the surface. Gradually flat-topped spurs were left between valleys, and the ends of those spurs abutting on the Tiber valley became frayed and cut into low hills by numerous small, wet-weather streams. A small group of these hills south of the Tiber, not otherwise distinguished from their fellows, forms the site of Rome. The oldest known traces of man in the Tiber valley have been found at Malnome,[3] near Ponte Galeria, which was once the approximate position of the river mouth. The finds, dating from the cuprolithic period and long antedating anything known on the site of Rome itself, suggest that the search for salt (*cf.* Pliny, *N.H.* XXXI, 74) began early. Salt, which was easily obtainable particularly on the right bank of the river (later the *campus salinarum Romanarum*) was the [illegible] commodity in continuous demand from the interior.[4] It is widely held that the road known as the Via Tiberina roughly embodies the primitive route along the right bank of the river, probably as far as Orte.[5] This is no accident: the easiest land route lies along this bank. Umbrians and Sabines would have crossed the river upstream near Otricoli and Nazzano. In its early development the Tiber Valley was not thickly populated, the 'pagi' of Antemnae and perhaps Fidenae being the only known centres actually in the immediate area of the river. The main Veian, Capenate and Faliscan centres all lay inland from the valley. Against this background Capena first appears in the eighth century. After the fall of Veii in 396 B.C. it was quickly overwhelmed by Rome and passed firmly within the Roman orbit.

There is no evidence that any considerable part of the Ager Capenas was inhabited until well after the beginning of the Iron Age. Characteristically Villanovan material is lacking in the area and the earliest *tombe a fossa* cannot be dated before the eighth century. In historical tradition Capena is first known through Cato's statement that the city was a Veientine foundation. This appears in Servius' commentary on Aen. VII, 697: '*et Cimini cum monte lacum lucosque Capenos. Lucos Capenos: hos dicit Cato Veientum (iuvenes) condidisse auxilio regis Propertii, qui eos Capenam, cum adolevissent, miserat,*' *i.e.* King Propertius, an otherwise unknown king of Veii, vowed a '*ver sacrum*' and sent the young men to found Capena.

The emendation (iuvenes) proposed by Wagner in 1849 is convincing; it is difficult to see how the lacuna could otherwise be filled to satisfy the requirements of both grammar and sense. If so, then the historical events described fit the formula of a [illegible] *sacrum*, whereby the children born within a certain period were dedicated to the achievement of some task (frequently the foundation of a colony) on attaining manhood. The significance of Cato's statement as preserved in Servius was recently pointed out by Heurgon.[6] Cato's remark, however, refers to Capena alone and the

[3] G. A. Colini, *Bull. Pal. Ital.*, xxxi, 1905, series 4,1, pp. 1–6; U. Rellini, *Il Lazio nella Preistoria d'Italia*, p. 17.

[4] The importance of the salt-trade is familiar, *e.g.* as a basis of the Hallstatt culture. For general remarks, v. Blümner RE, *s.v.* 'Salz.' On the Tiber *salinae*, v. Nissen, *Italische Landeskunde* i, 107–9.

[5] Ashby, 'La Rete stradale Romana nell'Etruria Meridionale in relazione a quella del Periodo Etrusco,' *Studi Etruschi*, iii, 1929, p. 171 ff. For a study of the development of the Tiber valley, see L. A. Holland, *Transactions of the American Philological Association*, lxxx, 1949, [illegible] 281–319.

[6] J. Heurgon, *Trois Études sur le 'ver sacrum'*, Collection Latomus, xxvi, 1957, pp. 11–19.

mention of *lucos Capenos* in Vergil can hardly be taken as a guarantee that Lucus Feroniae owes its origins to the same colonising movement, as Heurgon seems to suppose.

Unfortunately Cato's statement, while tempting, is neither provable nor disprovable on the facts available. His source is quite unknown. All that can be said is that the statement runs counter to the present archaeological evidence, which suggests, on the basis of pottery, that Capena's cultural links always lay more with the Faliscan peoples than with the Ager Veientanus. The affinities with her northern neighbour were strong both in the field of pottery and language. The Capenates spoke the Faliscan dialect, which differed little from Latin but was written in an alphabet derived from Etruscan (with certain peculiar forms).[7] Capena lay on the southern boundary of the area where the dialect was spoken, which included Civita Castellana (*Falerii Veteres*), S. Maria di Falleri (*Falerii Novi*), Carbognano, Corchiano, Caprarola, Fabbrica, Gallese and Narce. Altogether ninety-eight Faliscan inscriptions are known from the Capena area; ▬ are more than a few words long, the majority being names scratched on bowls and dishes or funerary dedications discovered during the excavation of the S. Martino cemetery.[8]

Capena's pottery too is best understood in close conjunction with Faliscan wares. The Archaeological Museum at Florence and the Villa Giulia Museum at Rome both contain small representative selections of Capenate ware, mainly derived from the excavations made during the first decade of this century.[9] The earliest known material is handmade dark *impasto* ware from a *pozzo* grave in the S. Martino cemetery; it cannot be dated earlier than the eighth century.[10] Subsequent development in pottery associated with *tombe a fossa* saw the introduction of local wheel-made pottery and copper-red ware, together with the beginnings of local painted pottery. The material from cremation graves of this period is practically uniform in Capena, Falerii, Narce and Corchiano, a distribution which corresponds with the area in which the Faliscan dialect ▬ spoken; it represents the self-contained zone delimited by the Tiber and the Ciminian Forest and contained on the southern side by the influence of Veii. Later pottery associated with *tombe* ■ *camera* includes imported wares (most frequently proto-Corinthian vases) and their local imitations. This was the stage at which decorative motifs reached their most distinctive development. As in other ▬ at the time, a double festoon of intersecting semi-circles was a frequent occurrence on incised *impasto* ware from Capena. A schematic lotus bud or palmette often served as ■ finial at the ends of the arcs. The use of animal forms in graffito was, however, a particularly local feature and the winged horse became a distinguishing mark of Capenate and Faliscan wares; it is not known at Veii. A typical olla from the S. Martino cemetery, for instance, shows three graffito horses each with two pairs of wings.[11] These highly stylised horses were rivalled by another kind

[7] For the Faliscan dialect in general, *v.* V. Pisani, *Le Lingue dell'Italia Antica oltre il Latino*, p. 316; R. S. Conway, *The Italic Dialects*, I, p. 370; J. Whatmough, *The Foundations of Roman Italy*, p. 232; E. Pulgram, *The Tongues of Italy*, p. 252; E. Vetter, *Handbuch der Italischen Dialekte*, pp. 327–31.

[8] The inscriptions are set out in *CIE*, Vol. II, 2(i), pp. 102–109.

[9] R. Paribeni, 'Necropoli del Territorio Capenate,' *Mon. Ant.* XVI, col. 277.

[10] R. Paribeni, *op. cit.*, col. 484. For a summary description of the Capena cemeteries, *v.* p. 144.

[11] R. Paribeni, *op. cit.*, col. 343 and fig. 62. For other portrayals of horses cf. figs. 59, 61, 63, 65, 66.

of animal motif. The slopes of M. Soracte were inhabited in antiquity by wild goats and it is hardly chance that goats also appear as a decorative feature in Capenate wares.[13] The taste for incised pottery in which these animal designs appear extended over a longer period of time in inland areas like the Ager Faliscus and the Ager Capenas than in the cities of seaboard Etruria. Centuries later a similar phenomenon seems to be traceable in the forms of Roman black-glazed wares which the potteries of the Tiber valley continued to use long after they had passed out of vogue in the more sophisticated coastal centres.[14] In this way incised *impasto* ware long remained in favour at Falerii and still more at Capena and the Umbrian towns. It continued on a lesser scale in Sabine territory and discoveries of incised pottery from Mentana supply an important link between the material from Capena and that of the southern Sabines and thus northern Latium.[15] In fact Capena's geographical position on the Etruscan side of the Tiber bend rendered her particularly suitable to act as an entrepôt for the assimilation and diffusion of fashions in pottery and metalwork in the Umbrian and Sabine regions. The only available distribution study of a Capenate product illustrates just how far material from Capena could penetrate into Central Italy. G. Colonna has traced the distribution of archaic belt plaques manufactured at Capena, examples of which have been found across most of Umbria, Picenum and Sabinum near towns as far apart as Terni, Teramo and L'Aquila.[15] As evidence accumulates, Capena may prove to have played an important role in the early cultural development of the central Appennines.

(*b*) *The Fall of Veii and Capena*

The Etruscan league was a loose federation of semi-independent city-states. Its early history, during which Etruscan power spread throughout much of central and northern Italy, shows that at one time it was capable of implementing common policy. Like all such confederations, however, it contained the seeds of its own disintegration, and the antagonisms that mark its later history robbed the league of its potential power. In many cases these dissensions were simply the reflection of strong regional diversities. There is a tendency to apply the label 'Etruscan' and 'Etruscanized' without reflecting how much the political unity of Etruria was limited by geographical, cultural and even linguistic differences. The wild and sparsely inhabited area of the upper Fiora valley was culturally far removed from the rich cities of seaboard Etruria. The Tiber valley around Orvieto was heavily influenced by features of Appennine culture. The population of the Ager Faliscus spoke a language of its own.

[13] Cato ap. Varro, *de re rustica*, II, 3. The goats, like the horses, are often portrayed with wings, e.g. a stamnos with two winged goats in R. Paribeni, *op. cit.*, col. 371.

[14] For evidence of this at Veii, *v. PBSR*, xxix, 1961, p. 56.

[15] *Not. Scav.* 1923, p. 188, 192, fig. 6.

[15] G. Colonna, 'Placche archaiche da cinturione di produzione Capenate,' *Archaeologia Classica*, x, 1958, pp. 69–80. The type was first noted by R. Paribeni (*Mon. Ant.*, xvi, 1906, col. 398) who thought at the time that they might be imports from the Teramo region. Colonna lists nineteen examples from Capena and twenty-three others from Terni, Paganica, Capestrano, Corropoli-Belvedere, Atri-Pretaia, Pettina (near L'Aquila) and several other Abruzzi sites.

This regionalism often stemmed from simple geographical factors similar to those that fostered the local coalitions and rivalries of classical Greece; the difference is that in modern Greece the physical barriers of mountain and sea cannot escape notice, while the internal divisions of ancient Etruria have now lost much, if not all, their significance. This is largely due to the development of modern agriculture and communications. Even in the second half of the last century the dense forests west of Bolsena were a brigand stronghold, and in the early Roman period parts of central and southern Etruria, like the Monti Cimini,[16] were still covered with primeval forest. These conditions, the extensive forests and the broken mountain ranges, divided the area into self-contained compartments.

When towards the end of the fifth century Rome's main military effort turned from her southern opponents, the Aequi and the Volsci, this effort was limited in the first instance to what one might call Etruria Tiberina: this term covers the group of Etruscan or Etruscanized cities which lay between the volcanic chain formed by the Monti Cimini and the Monti Sabatini and the great Tiber bend near M. Soracte. Apart from the linguistic and ethnic differences, these cities—Veii, Capena, Falerii and Fidenae, the Veientine bridgehead on the left bank of the Tiber on the route to the south through the Palestrina gap—dominated the middle river-valley commercially and had interests, and indeed a historical development, which differed markedly from those of seaboard and inland Etruria. This cleavage is historically important; it explains both why the struggle was confined to these cities and why a seaboard Etruscan city like Caere apparently took Rome's side during the later stages of the war.[17]

Livy nowhere explicitly sets forth the precise motives behind the long struggle between Veii and Rome, but they can be inferred from passing references. They emphasize the economic exploitation of the lower Tiber and control of the river crossing at Fidenae. Veii's period of development and prosperity[18] apparently came late in comparison with the other cities of Etruria and derived in part from her control of the Tiber trade route (by means of Fidenae) and access to the salt-beds at Ponte Galeria near what was, at that time, the Tiber mouth. Though Livy leaves the importance of the salt-beds to be inferred,[19] he was aware of the importance of water transport[20] and gives some indication of the volume of corn barges which came down the Tiber.[21] The importance of the [illegible] of Fidenae, controlling the river-crossing, is easily explained, particularly as it lay at the end of the Cremera valley, Veii's natural line of communication with the south. The strategy behind the exploits of the Fabii[22] was simply that of cutting off Fidenae from Veii. With the final defeat of Veii, control of the lower Tiber valley passed out of Etruscan hands and one may wonder why for thirty years the *concilium Etruriae* postponed any collective effort to safeguard Veii, as the representatives of Capena and Falerii

[16] *invia atque horrenda:* Livy, IX, 36, 1.
[17] Livy, V, 40. A similar view has recently been advanced by M. Sordi, *I Rapporti Romano-Ceriti e l'Origine della Civitas sine Suffragio*, p. 1 ff. For the general background, *v.* R. A. L. Fell, *Etruria and Rome*, p. 87 ff.
[18] Dion. Hal., III, 6, 1.
[19] V, 45, 8, VII, 17, 6.
[20] IV, 34, 6–7.
[21] IV, 52, 6, V, 13, 1.
[22] II, 42–54.

urged. The reason given by Livy and most modern historians, the imminence of the Gallic *tumultus*, is first given in 396,[23] but in fact the threat from the Gauls considerably antedated this. Behind Livy's formal reason, however, there are hints of the political and social differences which served to set Etruria Tiberina apart from Etruria proper: indeed the force of the 'Gallic invasion' argument is weakened in the same sentence[24] by the clear admission of political pique that had effectively blocked aid to Veii on previous occasions—*antea se id Veientibus negasse quia, unde consilium non petissent super tanta re, auxilium petere non deberent.* Elsewhere in his text can be found the reasons for the political alienation of Veii and her allies. Veii had taken the initiative in the war without the approval of the other cities, and the city was ruled by a king discredited in the rest of Etruria.[25]

The first reason implies economic indifference to, and political renouncement of, a fringe area, whose value as an outlet to the south was now greatly lessened by the expansion of Rome in Latium. The Etruscan cities, particularly those of the seaboard, whose fleets had been defeated by the Greek colonists of Sicily and S. Italy not long before, had their own problems and had no incentive to help—*suo consilio bellum initum suis viribus exsequi nec adversarum rerum quaerere socios.* The second emphasized a social cleavage between Etruria Tiberina and most of the other sections of Etruria which were moving towards a more democratic system of government.

In default of central and coastal Etruria, Veii could only rely on the aid of Falerii and Capena. If Cato is right to imply that the latter was founded by a *ver sacrum* from Veii,[26] this would have given the Capenates a special interest in the preservation of their mother city. In fact, as they had foreseen,[27] once Veii fell, the reduction of Capena was quick to follow. The physical obstacles of the Treia gorges postponed the capture of Falerii for over a century.

(c) *The Ager Capenas in the Roman Period*

After the fall of Veii Rome turned against Capena and Falerii, as both cities had foreseen. The former was soon subdued, not by direct attack—Capena was a difficult site to besiege—but by ravaging the countryside, and the Roman frontier was advanced to the slopes of Soracte.[28] In the same year (traditionally 395 B.C.) Falerii was attacked and, according to Diodorus, sacked; but as he records a peace treaty with the Falisci in the following year, the city clearly cannot have been destroyed or captured.[29] The non-Etruscan element in southern Etruria probably formed an appreciable percentage of the population and it is not surprising to find that Veians, Capenates and Faliscans had deserted to the Roman side during the struggle. They

[23] V, 17. Livy's text is corrupt at this point but, whatever the precise wording of the original, *gentem invisitatam* can hardly refer to anyone other than the Gauls.
[24] V, 17, 7.
[25] IV, 24, 2; V, 1, 2, cf. 6.
[26] v. p. 119.
[27] *derictis Veiis bello quoque Romano se proximos fore credentes.* V, 8, 4.
[28] Livy, V, 24.
[29] Diod., XIV, 96, 5.

were rewarded with the citizenship and a grant of land[30] and enrolled in four new tribes—Sabatina, Tromentina, Arniensis and Stellatina, of which the last-mentioned covered the Ager Capenas.[31]

The subsequent history of Capena is singularly uneventful. In the middle and late Republican period there are only a few scattered literary references, more concerned with the Ager Capenas than with Capena proper.[32] Cicero states that the Ager Veientanus and the Ager Capenas were used in making land-grants to veterans in 46 B.C.[33] Capena appears twice in the *liber coloniarum*, first as *colonia Capys* (I, 216) and then as *Capenus* (II, 225).[34] Practically nothing is known about the later history either of Capena or of Lucus Feroniae; the latest of a group of Imperial dedications from Capena belongs to the year A.D. 256. In the third century a veteran records Lucus Feroniae ■ his native town.[35]

Despite the lack of information available, constitutionally Capena is of interest on two counts. The town belonged to the small group of *municipia*—Anagnia, Cumae, Lavinium and Capitulum Hernicum—where the *praetura* was employed even in the Imperial period.[36] At Capena, where the origin of the magistracy is unknown, the *praetor* (*CIL* XI, 3873) probably held the same post as that held by the *dictator* at Sutri and Caere.[37] The importance of the office appears in the creation of a *praetor Etruriae* in the formal organization of the Etruscan League. The existence of a non-collegiate *praetura* at Capena is perhaps paralleled in early inscriptions from Falerii and probably forms a survival from the magistracies of pre-Roman Etruria.[38]

Secondly, in inscriptions the *Capenates* are frequently referred to as *foederati*.[39] This has led to the belief that the title refers ■ a special relationship between Capena and Rome, and that the rare example of ■ *municipium foederatum* can be explained by Capena's position as one of the oldest Roman *municipia*, whose exact status would be imprecise.[40] The difficulty of the argument is obvious; it is very improbable that, in ■ period as early as the fourth century, the Romans took the trouble to give Capena a special position in the state, let alone that the title was preserved intact over such a long period.[41] Another explanation is perhaps nearer the truth. It suggests that Capena was *foederata* in the sense that it was composed of ■ synoecism of several communities formed at a much later date than the fourth century. Its principal support is derived from an inscription found in 1864 near the site of *Ad Vicesimum* on the Via Flaminia, in which L. Valerius Maximus is described by the words:

[30] 'in civitatem accepti qui Veientium, Capenatiumque ac Faliscorum per ea bella transfugerant ad Romanos agerque his novis civibus adsignatus.' Livy, VI, 4, 4.

[31] Livy, VI, 5, 8.

[32] Livy, XXII, 1, 9; XXVII, 4, 14; XXXIII, 26, 8, Cic. *in Verrem*, II, 51; *pro Flac.*, 29, 71; *de leg. agr.*, II, 66.

[33] *ad Fam.*, IX, 17, 2. The importance of this statement in da[illegible] the foundation of Lucus Feroniae as a colony is discussed on pp. 194–195.

[34] Capena and Lucus Feroniae are wrongly grouped in the Picene region. *v.* R. Thomsen, *The Italic Regions*, p. 298.

[35] *Not. Scav.*, 1953, p. 21; *CIL*, VI, 2584.

[36] Beloch, *Römische Geschichte*, p. 498; A. N. Sherwin-White, *The Roman Citizenship*, p. 64.

[37] Kornemann, *Klio*, xiv, p. 199.

[38] *CIL*, XI, 3081, *cf.* 3156.

[39] 'municipium Capenae foederatum': CIL XI, 3932. 'municipium Capenatium foederatorium': 3936. 'Capenates foederati': 3873, 3876.

[40] Beloch, *Der Italische Bund*, p. 113.

[41] De Sanctis, *Storia di Roma*, p. 106.

trium civitatium omnibus honoribus functus.[42] On this hypothesis the *municipium foederatum* would have been formed from three *civitates*, namely those of Capena, Lucus Feroniae and Seperna (civitas Sepernatium restored from CIL XI, 3939 and placed in the Nazzano area). The existence of Seperna is based on reasonable evidence but the main objection to the argument is not one of detail; it lies in the improbability of a confederation between a *municipium* (Capena) and a *colonia* (Lucus Feroniae). None of the other allegedly similar federations are true parallels[43] but, if the *municipium*, which in origin represents a collection of rights rather than a community,[44] predated the colony at Lucus Feroniae, the objection would disappear. This would mean that the Capenates were *foederati inter se* at an early date, perhaps in the same way that Praeneste led a league of eight *oppida* (Livy VI, 29, 6). Certainly the existence of a *foederatio* between three separate communities, as suggested by *CIL* XI, 3939, is confirmed by two inscriptions attesting the survival of three separate decurial boards: *L. Vetulenius Caricus decurialis III dec(uriarum)*, XI, 3888, and *Q. Caecilius Amandus scriba librarius quaestorius trium decuriarum*, XI, 7764.

III. THE SOUTHERN AND CENTRAL AGER CAPENAS

(pls. XLI and XLIII)

(*a*) *Topography and Method*

It is not possible to reconstruct the political boundaries of the Ager Capenas in any detail. The only facts recorded by the literary [redacted] are that the area contained the towns of Capena and Lucus Feroniae. The broad outline, however, may be determined from the facts of geography. The territory of Capena comprised most of the wedge-shaped area bounded by the line of the Via Flaminia, M. Soracte and the Tiber valley below Nazzano. In its way each of these provides [redacted] effective topographical boundary. At two points, however, the divisions are less clear and the boundaries here adopted are those of convenience. In the south, where the Ager Capenas marched with the Ager Veientanus, the present report ends at the line of the Roman road that runs south-eastwards from Castelnuovo di Porto to the Tiber valley. At the other end of the area, east of M. Soracte, the isolated region north-west of Ponzano Romano belongs geographically to the Ager Faliscus, but will be included in this survey in order to form a link with the previous work undertaken by the British School in the neighbourhood of Civita Castellana.[45]

It has often been remarked that the Via Flaminia ran for nearly 35 miles from Prima Porta without any stream crossing large enough to require a culvert. This remarkable stretch of road, from the point where it climbs out of the Tiber floodplain at Prima Porta to the Ponte Ritorto[46] 2½ km. south-east of Civita Castellana,

[redacted] CIL XI, 3939.

[43] *e.g.* Cirta in Numidia, formed from four Roman colonies (CIL VIII, 8318, 8319) or that among the Vocontii of Gallia Narbonensis (Pliny, N.H. III, 37). Cicero calls Aricia a *municipium foederatum* (Phil., III, 6, 15).

[44] Kornemann, RE, *s.v.* 'Municipium.'

[redacted] M. W. Frederiksen and J. B. Ward Perkins, *PBSR*, xxv, 1957, p. 67 ff.

[redacted] M. H. Ballance, *PBSR*, xix, 1951, p.78.

runs along a series of winding ridges that form the watershed between several river systems. To the east all the streams run across the Ager Capenas and flow directly into the Tiber. To the west the surface drainage system is split into two by the important watershed that joins the Flaminia ridge at Stazione Magliana, near Romitorio, 4 km. west of Morlupo, itself the natural boundary between the Ager Veientanus and the Ager Faliscus. To the south the Via Flaminia forms the watershed between the Fosso della Molaccia, which joins the Tiber at Prima Porta, and those streams that join the Tiber above this point. Along the northern side of the area rise several streams that follow roughly parallel courses before joining the river Treia above Civita Castellana and so flowing into the Tiber.

Geographical factors shaped the natural boundaries of the Ager Capenas; they were no less important in controlling its internal characteristics. The whole of the Ager Capenas drains directly into the Tiber. The streams normally flow in a south-easterly direction and the geology of the region lends them an importance quite out of relation to their size. With the exception of M. Soracte, an isolated outlier of the tertiary limestone of the Appennines, the whole area belongs to the quaternary period and is, geologically speaking, very recent.[47] Apart from the limestone of Soracte and the travertine strata of the Lucus Feroniae plain with its associated clays (p. 189), almost all the present configuration of the landscape is due to the erosion of the tufa deposits formed by the eruptions of the Monti Sabatini–Monti Cimini chain. Erosion is still very active. Deep gullies scar the hillsides, and the river valleys into which they drain have made their way down through the horizontally bedded tufa deposits, often leaving truncated bluffs overlooking the flood plain of the Tiber.

The great majority of the sites described in this survey survive only as a scatter of sherds and building debris on the ground. Most of them were small farmhouses and, though one can often make an estimate of their approximate size from the debris, it is impossible, save in a few instances, to determine what form of building or type of ground-plan is represented. By a careful collection of sherds one can often obtain some idea of the period when the building was built and how long it was inhabited.

As remarked in the introduction (p. 117) the method has its limitations. Not only are the conclusions to be drawn from surface finds fallible in themselves, but the chronological implications of the occurrence of the various types of ware are valid only in the most general terms. There is a very substantial overlap, for example, between the Red Polished wares (*terra sigillata chiara*) and the Arretine and kindred fabrics of which it was an imitative development; sites yielding the former ware may be of any date between the early second and the sixth centuries A.D. On the other hand the *terra sigillata* of Arretium, Puteoli and elsewhere, which came into production soon after 30 B.C., very rapidly ousted the black-glazed wares of the preceding period, and a map of the sites on which the latter is found can give a very fair general picture of the extent to which a given area had been settled by Augustan times.

[47] The best geological treatment of the area is by G. A. Blanc, 'Sur le Pléistocène de la région de Rome, Stratigraphie—Palaeoéchologie—Archéologie préhistorique,' reprinted from *Actes du IV Congrès International du Quaternaire*, 1953, p. 3 ff.

(*b*) *The Development of Communications* (*v.* General Map, pl. XLIII)

(i) *The Etruscan Period*

It has generally been assumed that the earliest route along the Tiber valley lay on the western bank of the river and was later roughly represented by the line of the Via Tiberina and the Via Campana, its continuation towards the salt-pans at the Tiber mouth.[48] Salt was the one commodity in continuous demand from the interior, and the western bank is the easier route along the valley. The later Via Tiberina roughly embodied this primitive route, probably as far as the Tiber-crossing at Borghetto. There were crossing places for Umbrians and Sabines at Badia near Ponzano, at Nazzano, at Fiano and at Lucus Feroniae. The last-mentioned, the earliest documented site in the Ager Capenas, differs from all neighbouring centres in occupying a completely indefensible position. It suggests that this religious centre may have grown up as a recognized stopping-place for travellers and merchants along the Tiber valley route. The site is first mentioned in connection with merchants[49] and it may well have served the same function as the grove of the Arval Brethren on the Via Campana.[50]

To the south a cross-country road linked Lucus Feroniae with the Etruscan settlement at Fontanile di Vaccherecia (p. 151). To the north the line of the Via Tiberina (and presumably its Etruscan antecedent) is largely lost across the Lucus Feroniae plain but can be traced north of Fiano, where it climbs and passes west of Nazzano along an important ridge that leads to the Tiber valley again at Badia, west of Ponzano.

On the western side of the Ager Capenas the other natural north-south line of communication was the ridge later followed by the Via Flaminia from Prima Porta to a point west of Civita Castellana. There is now evidence to show that the section north of Stazione di Magliano (and by implication the stretch to the south) was in use during the Etruscan period (p. 165). In fact the whole route was almost certainly functioning as the route to Falerii long before the establishment of the Roman road by C. Flaminius in 220 B.C. It is hardly chance that Otricoli (*Ocriculum*), the first Umbrian town with which Rome entered into alliance in 306 B.C., was nearest to the point where the Flaminia later crossed the Tiber into Umbria.

At Stazione di Magliano the ancient route connecting Veii with Falerii and Capena reached the Flaminia ridge. A kilometre to the south-east the road to Capena branched north-eastward along the narrow twisting ridge that led to the site of the ancient town. It then continued eastwards both to Lucus Feroniae and to a Tiber-crossing below Fiano, opposite the Passo Corese area (p. 201). With its ramifications towards Veii the route formed an important east-west link connecting the central section of Etruria Tiberina with the Sabine territory opposite Lucus Feroniae.

Further north, the Tiber-crossing at Badia was linked to the Flaminia ridge by a remarkable track that ran through woodland round the northern tip of Soracte. Several early sites leave no doubt of its Etruscan origin.

[48] Ashby, *Studi Etruschi*, iii, 1929, p. 171. See above, p. 119; and L. A. Holland, *op. cit.*, p. 281 ff.
[49] Livy, I, 30; cf. p. 192.
[50] Strabo, 5, 3, 2; cf. *Eph. Ep.*, viii, 1899, p. 341.

(ii) *The Roman Period*

During the Roman period the existing road-network was elaborated rather than changed. All the Etruscan roads show signs of continued use and the Via Tiberina and the Via Flaminia remained the principal routes within the area. The elaboration took place mainly in the lateral connections between the two roads. In the M. Palombo area a paved road was built from the Flaminia near Castelnuovo di Porto to the major site at Fontanile di Vaccherecia and on to the Tiberina. Another road left this route near its halfway point and ran along the M. Palombo and Acquabianca ridges. The existing road to Lucus Feroniae became incorporated in the system by means of a triangular junction. The main route to Capena continued to be the ridge-road across M. Avila. Further north, the Flaminia ridges (pp. 168–175) were opened up during the later Republican period. Vallelunga, the main ridge, carried an important route, which was paved for the most part of its course, and even a small ridge like Montelarco had its own service-track. The various ridges were traversed by a cross-country track that linked them to Capena and which may also have served as a quick route towards Narce, practicable only in the dry season.

The main growth, however, was in lateral communication between the Flaminia ridge and the Tiber valley. North of Rignano Flaminio another road appeared, similar to the M. Palombo ridge-road mentioned above. It left the Flaminia ridge near Stazione S. Oreste and ran under the southern end of M. Soracte along a narrow twisting ridge for over eleven kilometres to the Tiber valley near Fiano. It was connected to Capena at two points. At M. Tartore a prominent route turned south and crossed the Fosso di S. Martino to the town, and five kilometres to the south-east a road traversing M. Pacciano formed a link with the Lucus Feroniae road and the eastern entrance to Capena.

East of Soracte the Via Tiberina continued to be the main means of communication. It attracted settlement along its course to the Tiber-crossing at Badia and was linked to the Flaminia-Fiano road by a track running north-east from S. Lucia. Several sites show that the other approach to Badia, the Etruscan road round the northern tip of M. Soracte, continued in use throughout the Roman period.

IV. DETAILED SURVEY[81]

(a) *The Flaminia-Capena Road* (fig. 1)

The paved road that served Capena left the Flaminia ridge at Km. 30·4, in the grounds of Madonna della Guardia, the presumed site of the *Ad Vicesimum* of the Peutinger Table (1).[82] The route then followed a twisting ridge north of the modern town of Morlupo for 4 km. as far as M. Rigorio, when it turned north along a dog-leg

[81] Figures in heavy type throughout refer to the site numbers given in the accompanying maps and check-lists.

[82] H. Nissen, *Italische Landeskunde*, ii, p. 371; Ashby, *Memorie*, p. 154, *JRS*, xi, 1921, p. 158; Tomassetti, p. 293. v., p. 167.

ridge that leads to the site of Capena. The first surviving section of ancient cutting occurs a few hundred metres from the Flaminia to the south of the modern Morlupo road, which soon coincides with the old line along the ridge crest. In cutting an access-road to a group of houses on the hill known as S. Michele part of a Roman site (**2**) has been exposed in section. The remains consist of a mortar floor 15·20 m. long and an average of 5 cm. thick. The floor itself was laid on a rough (20 cm.) layer of compacted earth and stone. At its upper end the room was covered by as much as 2·10 m. of eroded soil, illustrating how in a tufa countryside even near the crest of a hill remains can be buried to a considerable depth.

Selce paving blocks survive at one point (934694) in the southern face of the present road cutting, but otherwise all trace of the ancient route is lost until the top of the ridge north of Morlupo. East of the church of S. Sebastiano a site yielding a wide selection of *terra sigillata* (**3**) lies at the end of a very large cutting that bisects the hill above the modern town. It is still impressive in scale, six or seven metres wide and as much as eight metres high (pl. XXXI, *a*). At the eastern end the modern road running north-east from Morlupo rejoins the original line along the ridge crest near site **4**, which has been destroyed in levelling the local football pitch. The winding modern line obscures the original route until north of Casale Angelo Custode, where a shallow cutting shows that the old road followed a more direct course inside the present loop. The *casale* itself occupies the site of a small Roman building (**5**). After this the main ridge turns due north and the original *selce* paving blocks can be seen embodied in the eastern edge of the modern road at 952702.

At the southern end of M. Rigorio the western approach to Capena then leaves the modern road from Morlupo to Capena-Leprignano and continues northwards along a narrow lane. One loose *selce* block survives at the road junction, several more a hundred metres further down the lane. The first traces of a paved road *in situ* appear on the western flank of M. Rigorio where a series of limestone (not *selce*) paving blocks line the floor of a substantial cutting (4–5 m. deep). Site **6** on the saddle between M. Aquila and M. Rigorio includes the remains of a concrete floor in *opus signinum*, presumably from a cistern. Slightly to the north lie three graves (**7**) all robbed and of uncertain date; a little over a hundred metres away another robbed tomb (**8**) yielded black-glazed ware and *terra sigillata*. Above the tomb the kerbstones of the road reappear and the whole of the road can be seen clearly where it crosses the modern track below the crest of M. Aquila, where an important ridge with several Etruscan sites diverges to the east (p. 133). The crest of the ridge is occupied by two substantial sites (**9, 10**) overlooking the line of the road. Blocks of tufa ashlar and a variety of pottery cover both sites, and below the latter a small cosmetic implement was found beside some surviving paving stones from the road. A hundred and fifty metres north a small building (**11**) has been ploughed out on the eastern slope of the ridge. Apart from a few scattered paving blocks and another small site (**12**) on a flat-topped section of the ridge, the next feature is a group of three tombs (**13**) on either side of the track in the area known as Le Macchie. Bucchero and black-glazed ware show that they belonged to the late Etruscan and early Roman period. On a projecting spur north-west of the tombs there are traces of a medium-sized site (**14**) with an underground chamber that may be of ancient origin.

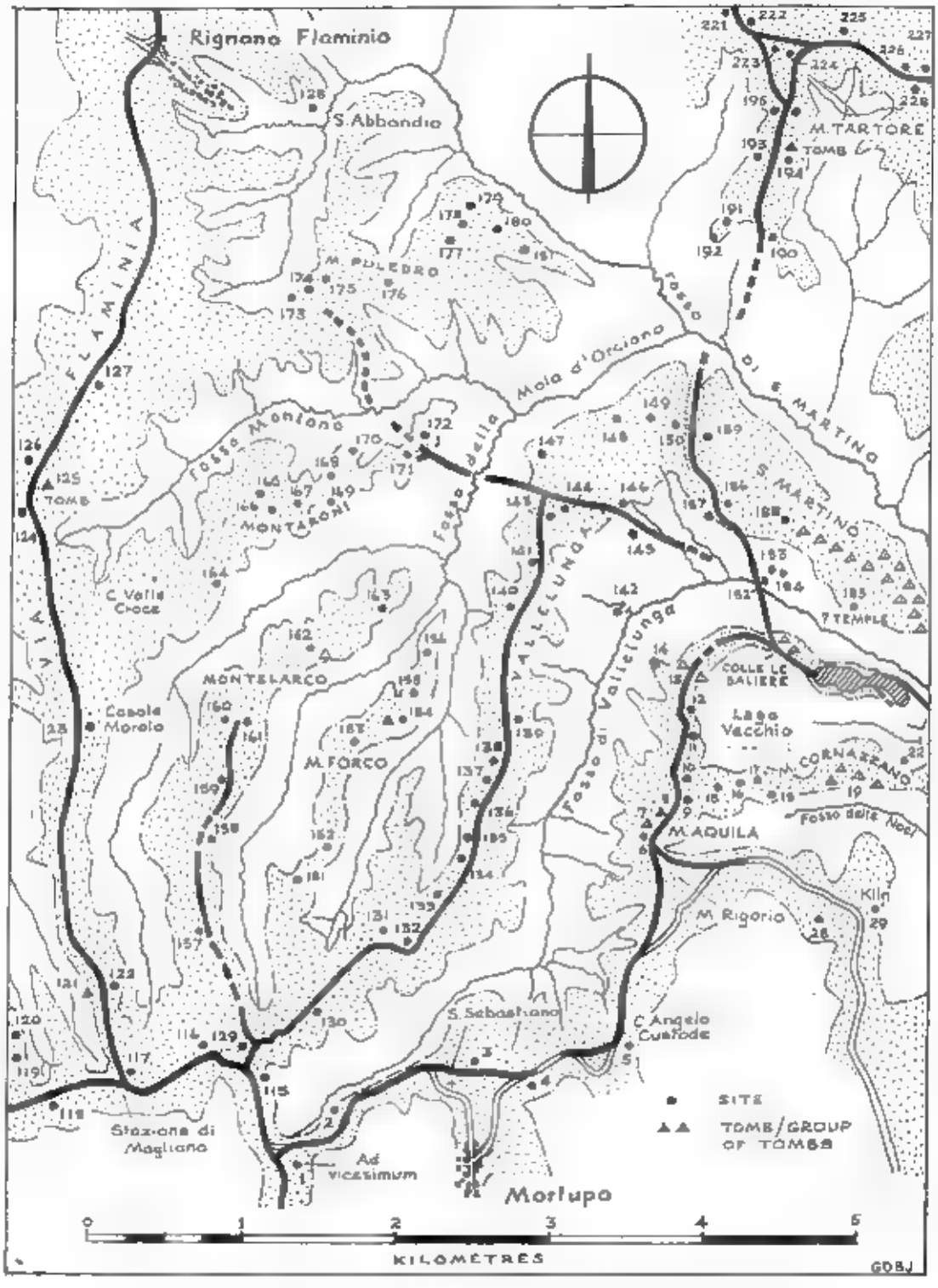


FIG. 1. THE CENTRAL AGER CAPENAS: WESTERN SECTION (*contours at 175 m.*)

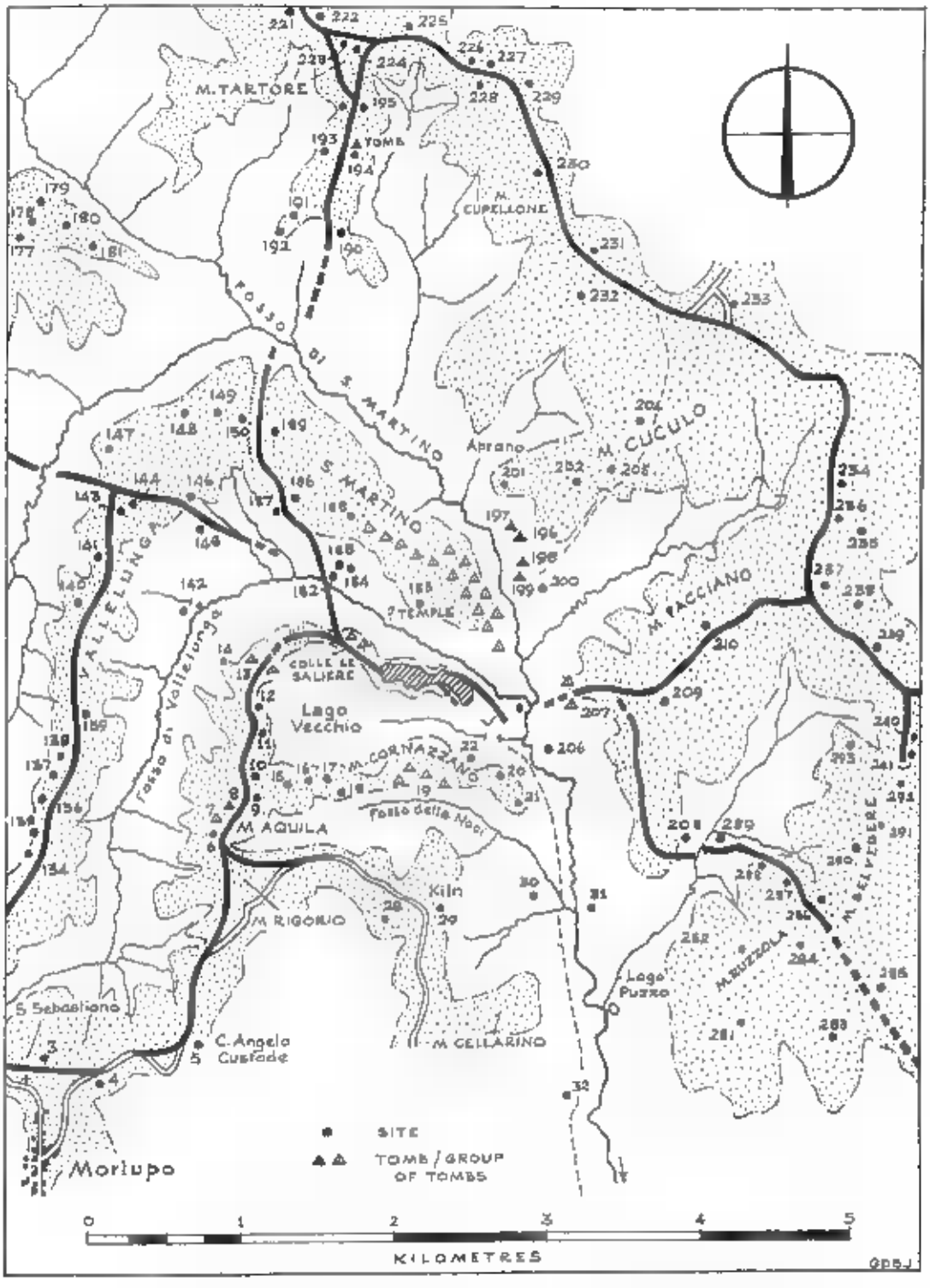


FIG. 2. THE CENTRAL AGER CAPENAS: EASTERN SECTION (*contours at 175 m.*)

Two hundred metres west of Colle le Saliere,[53] [illegible] of Capena's cemetery areas, a large cutting representing the line of the ancient road descends the spine of the ridge, while the modern track follows [illegible] lower course to the south. Sporadic paving stones visible along the hillside mark the course of the road towards the western gate of Capena, where Stefani cleared a section of paving in 1956. The last hundred metres of the road were, until recent years, lined with a variety of Roman masonry fragments, mainly of good-quality Italian marbles and belonging to funerary monuments and dedications set outside the city gate.[54]

1 928688. *Ad Vicarinum* (Madonna della Guardia), v. p. 167.

2 932692. Site on the S.E. side of the ridge-crest of S. Michele where a series of *villini* are now under construction. The remains of a room (15·20 m. long) can be seen in section along the western side of a road-cutting. A mortar floor (*c.* 5 cm. thick and laid on a 20 cm. layer of compacted earth and stone) is heavily covered by eroded soil, which reaches a depth of 2·10 m. at the upper end.
Roman coarseware.

[illegible] 941695. Small site at the western end of the large road-cutting crossing the ridge north of Morlupo.
A wide variety of *terra sig.*; coarseware.

4 945695. Remnants of a site largely destroyed in levelling the Morlupo football pitch.
Coarseware.

5 949696. A few coarse sherds from a very eroded site on the lateral spur now occupied by Casale Angelo Custode.
Roman coarseware.
(For the ridge south of the Casale, v. p. 145.)

6 952710. Site in the saddle between M. Aquila and M. Rigorio containing the overgrown remains of a concrete floor in *opus signinum*, presumably a cistern.
Roman coarseware.

7 952711. Group of at least three tombs immediately to the north of site 6. As no pottery is available there is no way of deciding whether they belong to the Etruscan or Roman period.

[illegible] 954712. Etruscan pottery from a rifled tomb immediately south of the crest of M. Aquila.
Burnished impasto ware; bucchero; coarse Etruscan wares; black-glazed ware; red painted ware; Archaic tile.

9 953712. The more substantial of two sites on the crest of M. Aquila. A series of tufa ashlar walls have been destroyed by recent ploughing.
Black-glazed ware; Red Polished ware. Amph. B.T. Tufa ashlar. *Op. sig.*

10 953713. The second of the two sites on the ridge-crest.
Coarseware. Amph. B.T. Tufa ashlar; *op. sig.*
A cosmetic implement (probably Etruscan) in the shape of a forceps was found below the sites close to the ancient road. It has two prongs (5·2 cm. long) and the top is pierced by a central hole.

11 954714. Large scatter of tile and pottery covering a vineyard on the central and eastern edge of the ridge.
Black-glazed ware; Red Polished ware; coarseware. Amph. B.T. Spindlewhorl.

12 954718. Small scatter of Roman coarseware on the ridge-crest.
Coarseware. B.T.

13 957724. Le Macchie. A group of at least three robbed Etruscan and early Roman tombs on either side of the modern trackway.
Bucchero; frags. of large terracotta jar; black-glazed [illegible] Tile (of Etruscan variety with small flanges). Human bone.

[53] E. Stefani, 'Capena: Ricerche Archeologiche nella contrada "Le Saliere,"' *Mon. Ant.*, xliv, 1958, p. 1 ff.
[54] *op. cit.*, p. 191.

14 953723. Medium-small Roman site on the N.W. spur of M. dell'Abbuccio.
Black-glazed ware; coarseware. B.T.; triangular brick; tufa ashlar; reticulate *tufelli*.
Below the site is a rock-cut tomb chamber (?) (2·90 m. by 1·70 m. and 1·50 high). The roof and wall have partly collapsed and the chamber has been used in recent times, but it could possibly be of ancient origin.

The Monte Cornazzano ridge (fig. 1)

The ridge that runs eastwards from the road to Capena at M. Aquila (beside site **9**) exhibits no trace of an ancient road but was occupied by a number of important Etruscan sites. East of M. Aquila a broad saddle connected the ridge with another crest, known as M. Cornazzano, due south of Capena, which contained a small cemetery of the Etruscan and Early Roman periods.

The eastern slope of M. Aquila was occupied by a substantial Etruscan site (**15**). In the saddle below lay the remains of one Roman and two Etruscan buildings (**16, 17, 18**). The first of the two Etruscan sites produced fragments of a cooking stand identical with the variety familiar at Veii.

Slightly over half a kilometre further east lies the small M. Cornazzano cemetery, with Etruscan and early Roman tombs (**19**). It runs in an arc along the upper edge of a southward-facing re-entrant overlooking the Fosso delle Noci. Only one tomb to the north-east survives to any great extent and this unfortunately has been robbed of pottery. It is clear from the associated sherds, however, that the cemetery belongs to the Etruscan and early Roman period. The finds listed under 4 separate nuclei, two being from general scatters, two from individual tombs. Nucleus 3 consists of sherds from a tomb which had recently been robbed by *clandestini*, but which yielded substantial fragments of the two black-glazed vessels illustrated in fig. 8, 1–2. The fourth group comes from the pottery of a collapsed tomb that still shows traces of three funerary couches. Tell-tale depressions marking the sites of collapsed tombs show that this small cemetery extended eastwards for a further three hundred metres.

After a small gap the ridge rises to a final spur overlooking the Fosso S. Martino valley. The flat-topped crest was occupied by one major (**20**) and one minor (**21**) Etruscan site. Twenty metres west of the main nucleus lies the entrance to a small cistern cut out of the soft tufa in the shape of a *cuniculus*.

In the northward-facing re-entrant below this pair of sites stand the remains of a small Roman cistern in *opus signinum* (**22**). The site which it served seems to have disappeared.

15 954712. Fairly substantial Etruscan site on the eastern slope of M. Aquila.
Impasto wares; Red Painted ware; bucchero. Archaic tile.

16 957714. Small nucleus of Roman material on the centre of the ridge.
Black-glazed ware; *terra sig.*; coarseware. B.T.

17 958714. Small Etruscan site in the saddle east of M. Aquila, a little to the west of the present track.
Burnished impasto; archaic cooking stand; bucchero. B.T.

18 962713. Medium-sized Etruscan and Roman site on the south side of the present trackway.
Bucchero; black-glazed ware; coarseware. Dolium Rim. Tufa ashlar. Archaic tile.

966715. *Nucleus 1*: scatter of pottery from a tomb-group on the eastern slope of the re-entrant.
Archaic coarseware; bucchero bases; black-glazed ware.

Nucleus 2: scatter of pottery from a tomb-group on the slope of the re-entrant that divides the cemetery in two.

Archaic coarseware.

Nucleus 3: pottery from a rifled tomb, including substantial parts of a small cup and a jug with an external green-black slip (v. fig. 8, 1–2).

Red impasto and black-glazed wares.

Nucleus 4: scatter of pottery around a collapsed tomb still showing three heavily eroded funerary couches.

Red impasto and buff coarseware; black-glazed ware with white painted pattern.

20 971714. Large archaic site on the eastward extension of M. Aquila south-east of Capena. 30 m. west of the main nucleus lies the entrance to an underground cistern.

Burnished impasto; black-glazed ware; coarseware. Dolia. Archaic tile.

21 972714. Extension of site **20** at the eastern tip of the spur.

Impasto wares. Archaic tile.

22 967716. The S.W. corner of a cistern, roughly half-way up the hillside due south of Castellaccio (Capena). The remains consist of two walls, 30 cm. thick and 1·34 m. and 1·85 m. long respectively, forming the S.W. corner of a cistern, fragments of which litter the slope below. The floor and walls were coated with fine *opus signinum*, which was laid with rolled corners. The main structure is built of small limestone and tufa blocks in light grey mortar.

(*b*) *Capena: the Ancient Town and its Cemeteries* (fig. 3; pl. XXV, *a*, *b*)

(i) *The Town*

The recent discovery of Lucus Feroniae and the publication of a group of Imperial inscriptions from Capena have firmly fixed the site of the latter on the hill known as Civitucola or Castellaccio, an identification first made by the Benedictine monk Pier Luigi Galletti in 1756.[55] The involved arguments for the identification of the site used by earlier antiquaries may now be discarded.[56]

'A visit to the site will scarcely repay the antiquary for the difficulty of reaching it.' Dennis's words are still true today, but the view that he describes so graphically may atone for the lack of archaeological interest.[57] The ancient city occupied the eastern end of the northern edge of a crater-like depression known as Lago Vecchio (or Il Lago) (plate XXIV). Difficult to approach and easily defensible, it occupied the hill known as Civitucola or Castellaccio, between the Fosso di Vallelunga and the small stream that drains the Lago Vecchio. Both streams then flow into the Fosso di S. Martino, the ancient river *Capenas* (p. 191). On the northern and southern

[55] G. Mancini, *Not. Scav.*, 1951, p. 18 ff. 'Capena: Iscrizioni onorarie di età imperiale rinvenute in località Civitucola.'

[56] Most of the earlier classical topographers had identified the site correctly, among them Gell (*The Topography of Rome and Vicinity*, 1846, i, p. 263), Nibby (*Analisi dei Dintorni di Roma*, 1848–9, i, p. 375), Deecke (*Die Falisker*, 1888, p. 55), Pariberi (*Mon. Ant.*, xvi, 1906, p. 278), Dennis (*Cities and Cemeteries of Etruria*, 1907, i, p. 225) and, of course, Ashby. Cluverio and Holstenius had placed the site of Capena at Fiano (*Italia Antiqua*, 1624, 2, p. 549; *Adnotationes ad Cluverium*, 1666, p. 62). Nissen favoured Rignano (*Italische Landeskunde*, ii, 1902, p. 371). Lanciani corrected his early choice of Nazzano (*Not. Scav.*, 1872, p. 62; 1878, p. 260), while Gori and Henzen opted for S. Oreste (*La Via Flaminia fino a Capena ed il Lago di Feronia*, 1864, p. 117; *Bullettino dell'Istituto*, 1864, p. 143).

[57] 'The view from the height of Capena is widely beautiful. The deep hollow on the south with its green carpet; the steep hills overhanging it, dark with wood . . . the bare swelling ground to the north, with Soracte towering above; the snow-capt Apennines in the eastern horizon; the deep silence, the seclusion; the absence of human habitations (not even a shepherd's hut) within the sphere of vision, save the distant town of S. Oreste, scarcely distinguishable from the grey rock on which it stands;—it is a scene of more singular desolation than belongs to any other Etruscan city in this district of the land' (*Cities and Cemeteries of Etruria*, i, p. 133).

edges of the town the hillside drops away very steeply making the whole site resemble a large-scale promontory fort. Only on the west, where the ancient road ran past the cemetery of Colle Le Saliere is the approach relatively easy.

The choice of the site of Capena is not an obvious one; the factors that seem to have favoured its growth are the presence of a guaranteed water-supply from the Fosso S. Martino nearby and a route of very early date. In its original form the road that connected Capena to the Flaminia seems to have extended further eastwards both to Lucus Feroniae and to a Tiber crossing below Fiano, opposite the Passo Corese area. As the route also had ramifications westwards from the line of the Via Flaminia into the Ager Faliscus and the Ager Veientanus,[48] it formed an important east-west link, connecting the central section of Etruria Tiberina with the Sabine territory opposite Lucus Feroniae. Its position astride this road would give Capena a certain economic and strategic importance and, if the town was in fact deliberately founded by Veii as Cato suggests (p. 119), this can be seen as a move by the latter to secure her north-eastern communications in much the same way that Fidenae guaranteed her interests to the south-east.

The only obvious entrance to the ancient site is that at the western end. The line of the ramparts is here broken by the cutting shown in pl. XXIV. On either side a steep slope clearly marks the limit of the ancient city and the line of its encircling rampart. Otherwise tantalisingly few traces of the wall survive. On the northern side this is the result of very heavy erosion, which has left only four or five tufa rampart blocks in position ■ m. north of the Republican building marking the site of Castellaccio (v. below, p. 137). Along the southern slope erosion has not been so severe. The only length of rampart surviving to any appreciable extent lies 180 m. due west of Castellaccio. There 15 m. of wall-footing are preserved on an alignment of 114°. Ashby, incorporating lost evidence from Gell, assumed that the line of the rampart maintained its level for the next few hundred metres to the east and was marked by ■ small but continuous tufa scarp beyond Castellaccio. Only a few blocks survive *in situ* 90 m. south-west of Castellaccio, but the whole theory has now been confirmed by a resistivity survey kindly executed by Dr. G. T. Schwarz in 1960. This traced the course of the rampart along the contour line, as suggested by Ashby (fig. 3). Ninety metres south of Castellaccio the layout of several blocks suggested the site of a gateway, and this was subsequently confirmed during ploughing in 1961 by the partial uncovering of a road paved with limestone blocks leading away to the south-east.[49] At the site of the gate it ■ possible to examine the components of the rampart. It was built of dark-brown pumiceous tufa blocks in *opus quadratum*, set in alternate layers of headers and stretchers. Individually some examples of blocks measured 0·62×0·57×1·25 m. and 0·50×0·57×1·20 m.[50]

On the northern side of the town opposite this gate there was another entrance close to the northern side of Castellaccio. It lies at the top of a road-terrace (4 m. to 5 m. wide) that skirts the south-eastern end of the town and drops down towards

[48] The road from Veii reaches the Flaminia ridge at Stazione di Magliano, 600 m. north of Madonna della Guardia.

[49] This must be the terrace beside the rampart marked as H on Gell's sketch of the city.

[50] Very similar dimensions to those of blocks measured by Ashby, *Memorie*, p. 161. The blocks at Sutri are almost identical in size (0·58×0·58×1·16 m.): *PBSR*, xxvi, 1958, p. 69.

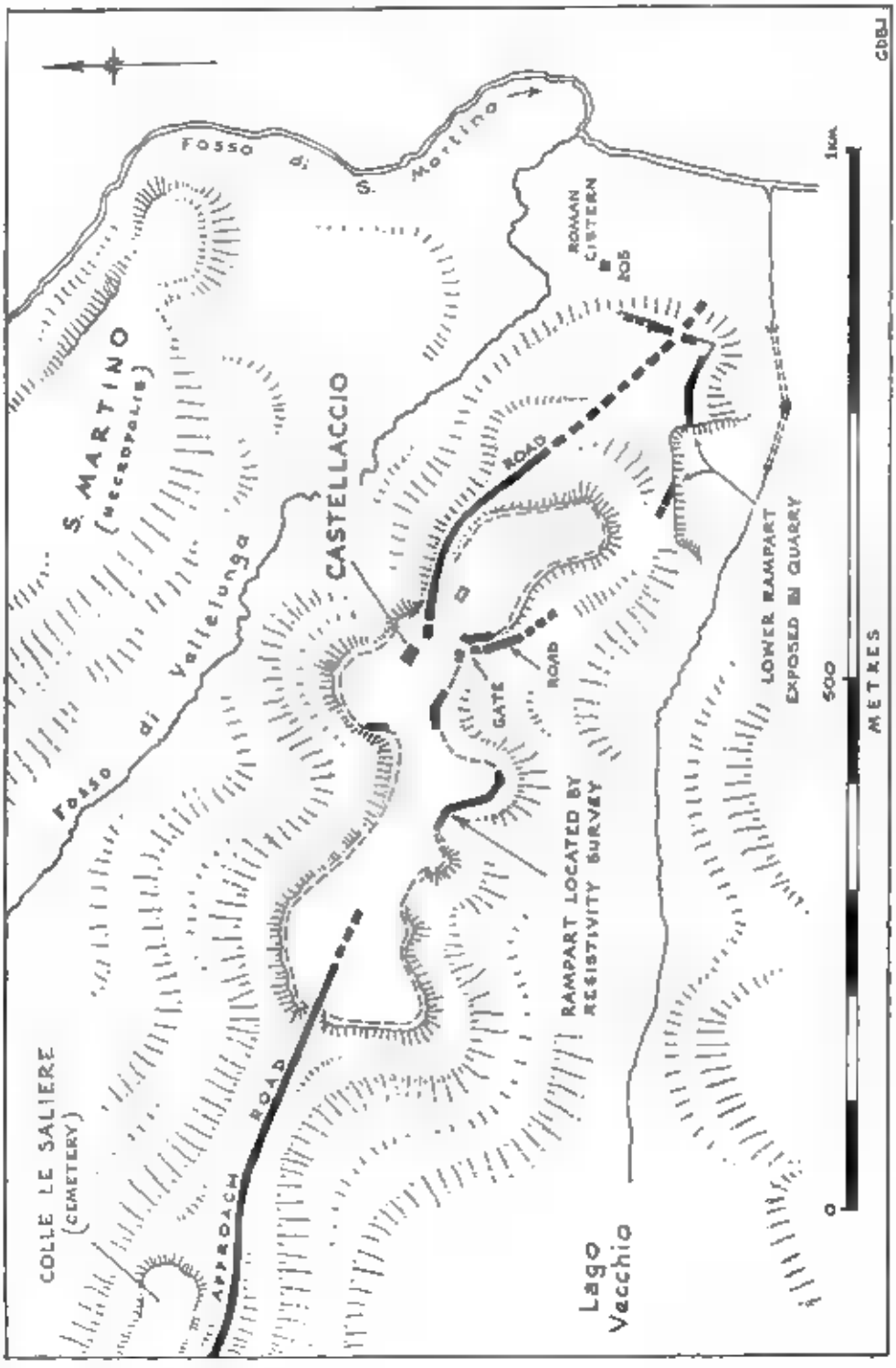


FIG. 3. CAPENA: GENERAL PLAN (*cf.* pl. XXV, *a*, *b*)

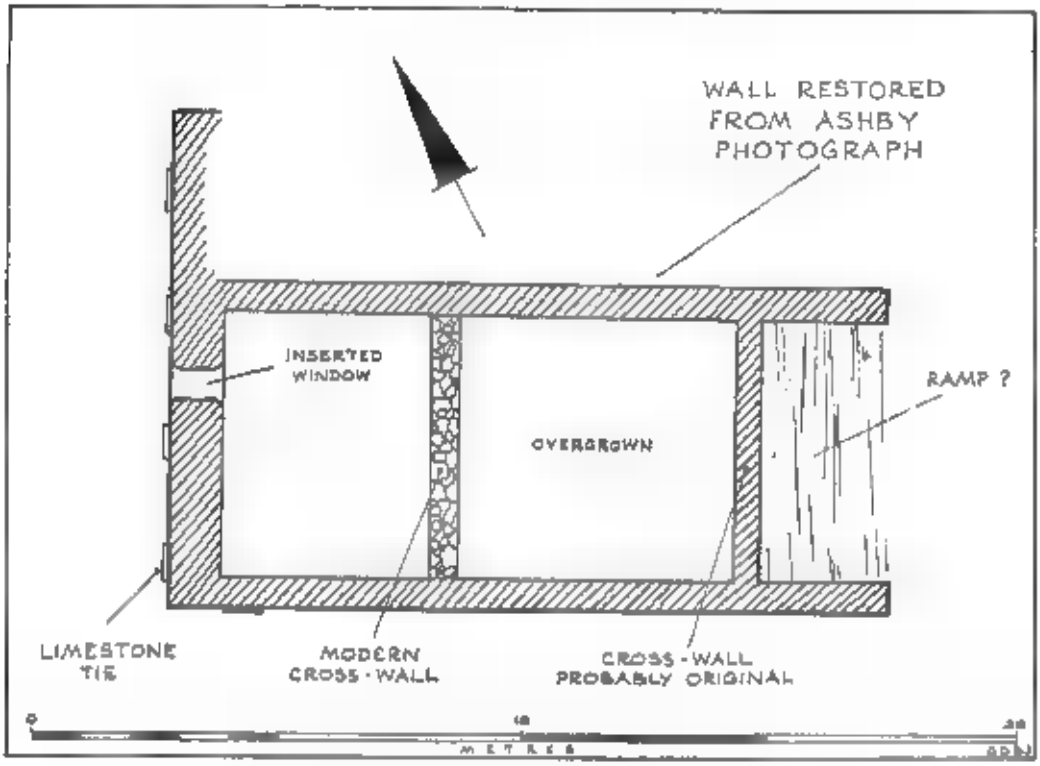


FIG. 4. CAPENA: REPUBLICAN BUILDING OF CASTELLACCIO (*cf.* pl. XXVI, *a*, *b*)

the Fosso di S. Martino through a gate in the lower rampart (p. 140). The road was originally paved with limestone blocks (some marked with wheel-ruts), ▬ of which have recently been ploughed up, marking its course below the upper town. On his sketch-plan of the area east of Castellaccio[61] Gell marked traces of several structures that have completely disappeared. A ruined hut[62] 100 metres from Castellaccio incorporates much ancient material but is itself of recent origin.

The only ancient structure readily visible within the area of the town is the ruin that occupies Castellaccio, the highest point on the site. It represents the remains of a rectangular building with walls of limestone and travertine set ▬ a massive podium; the western wall is the main feature that survives above the level of the podium (fig. 4, pl. XXVI). At present it stands to a height of 10·70 m., though this cannot be taken as the original height because some of the lower face represents foundation layers exposed by erosion. Four projecting limestone blocks (75 cm. × 30 cm. and *c.* 1·80 m. above ground level) probably formed the ties for a marble or travertine facing and roughly mark the height of the original podium. Above one of these a small section of offset (3 cm.) facing survives and shows that originally four pilasters rose from the four tie-blocks. Hardly any of the original facing is

[61] Reproduced by Ashby, *Memorie*, p. 160, fig. 11, and Stefani, *op cit.*, p. 194.
[62] Marked as D on Gell's plan.

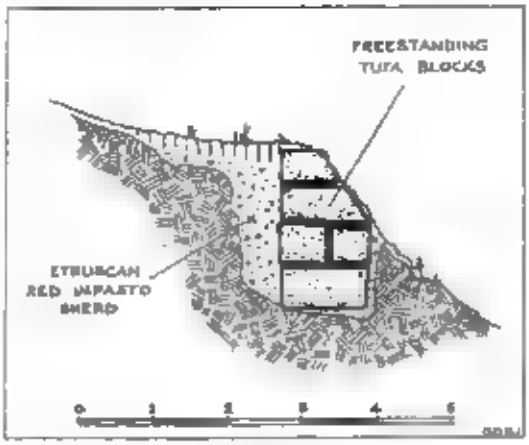


FIG. 5. CAPENA: LOWER RAMPART AND QUARRY FACE (*cf.* pl. XXVI, *c*)

preserved, but in the upper course of the wall a small area of *opus incertum* facing can be seen at the height of 9·10 m. If the constructional parallels hold good,[63] this would date the building to the period around the beginning of the first century B.C., though in the Ager Capenas allowance should be made both for conservative taste and the abundance of limestone and travertine for this style of masonry. At a height of 9·90 m. the wall is pierced by a narrow window (0·70 × 1·30 m. high), but on examination this proved to have been inserted in the original structure and must therefore belong to the medieval occupation of the site. The western corner of the building has collapsed, revealing the way in which the podium was constructed (pl. XXVI, *b*). The outer shell was a wall 1·10 m. thick and 1·39 m. high; a building line shows that it was built in two stages, the limestone tie-blocks being set on top of the first level. Behind the outer wall the interior was filled with mortar and limestone rubble and the outside wall of the superstructure (1·70 m. wide) was built across both the containing wall and the filling of the podium.

The interior of the building is of some complexity. A small section of the northern wall is preserved at the corner where it joins the west wall in a non-bonded junction. The inside face of *opus incertum* still survives. The interior is traversed by two cross-walls, both built of Roman material, but only that to the east is convincing as an original element of the plan. The survey embodied in fig. 4 represents the most that can be extracted from the tangled mass of vegetation without the help of a forest fire. It is, if anything, conservative; for a variety of reasons neither of the plans offered by Stefani[64] and Ashby[65] is really convincing on the spot. Much more important is Ashby's photograph, which shows three-quarters of the wall still standing and without any sign of doors or windows. Since neither this nor the still-surviving western wall originally contained doors or windows, and since there is little sign of any entrance along the southern face of the podium, the form of the

[63] G. Lugli, *La Tecnica Edilizia Romana*, i, p. 470 ff.
[64] *Mon. Ant.*, xliv, 1958, p. 4, fig. 2.
[65] *Memorie*, p. 163, fig. 14. His photograph is fig. 13.

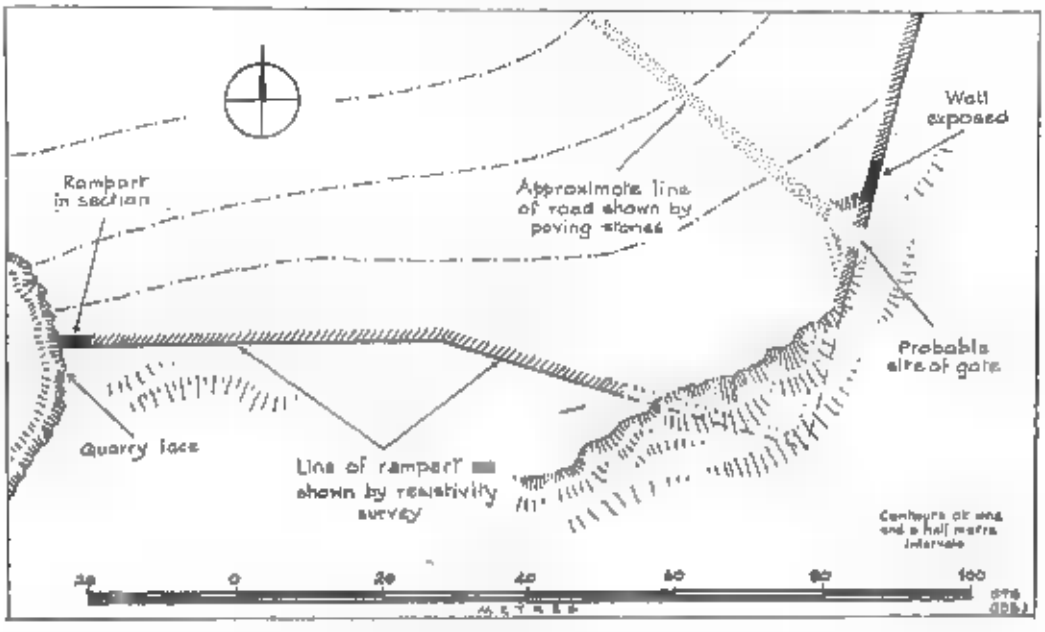


FIG. 6. CAPENA: PLAN OF LOWER RAMPART (*based on resistivity survey by Dr. Theodor Schwarz, 1960*)

rectangular building becomes clearer. The entrance must have lain on the eastern side of the podium. One would expect the exterior of this public building to have been broken by some form of engaged columns or pilasters. This explains the presence of pilasters rising from the four limestone ties at the base of the western wall but does not make the nature of the building any clearer. Its position at the highest point within the city shows the importance of the structure, but the assymetries of the plan defy exact identification of the kind of building involved.

If this were all that had been done, the record would be a dismal one—a few additional details, but for the most part a dreary record of how remains observed by Gell or Ashby are no longer visible today. On the eastern side however, the picture has been amplified by the excavation of a kaolin quarry that has produced new information about the lower section of the town.

The small quarry in question has been worked for the last few years at the foot of the spur on which Capena stood. Quite unexpectedly the eastern quarry face revealed in section a large rampart of free-standing tufa blocks and the clear outline of its foundation trench (fig. 5; pl. XXVI, *c*). The surviving section is 2·16 × 1·08 m. broad. The individual blocks, trimmed on either lower edge and along the outer face of the wall, are a uniform 1·08 × 0·54 × 0·54 m. in size and are laid in alternate courses of headers and stretchers. A few fragments of red impasto ware found incorporated in the fill of the foundation trench show that the wall is Etruscan in date.

The size and alignment (87°) of the rampart are surprising and ■ resistivity survey kindly executed by Dr. G. T. Schwarz enabled the course of the wall to be traced onwards for some distance, as shown in fig. 6. It continued due east for ■

further 50 m., then turned gently east-south-east before turning north-north-east. The actual corner has been lost through the heavy erosion of the hillside, but the wall was traced for a further 65 m. and a small section of face is visible at approx. 40 m. The most interesting feature revealed by the survey was a gap (*c.* 3 m.) in the wall, probably marking the site of a gate. Its position coincides with the line taken by the road that descends in a terrace from Castellaccio along the north-eastern edge of the town; in fact, travertine blocks forming the road have recently been ploughed out along an alignment that bears directly on the site of the gate identified by the resistivity survey.

Later in 1961 the lower rampart was again located in a freshly cut quarry-face 60 m. west of the point where it was first found. The section revealed a surprisingly varied collection of features, including 2 *cuniculi*, three pits and a well-shafts. Their importance lies in the possibility of dating the individual features from the pottery they contain. Most were Etruscan in date; with one exception all had been filled by silt. The exception was the well-shaft, which lay directly beneath the line of the rampart. It had been deliberately filled with stone packing before the construction of the rampart to prevent the risk of subsidence. The packing sealed a stratum of sixth and fifth century pottery that lay at the bottom of the well-shaft and so dated the construction of the wall to the closing decades of the fifth century.

There is still much to be learnt about the lower rampart. Only a third of its probable course is known, and the points where it joined the upper circuit wall have not been found. Historically, however, the very existence of such a lower rampart, and the annexe it created, raise several important issues. It implies the presence of a considerable extra-mural settlement and this in turn implies that Capena was sufficiently prosperous at the time to have attracted a settlement too large to be contained within the original limits of the town. Such extra-mural settlement would have remained unwalled until a cogent reason for the construction of a secondary rampart appeared. When one remembers the premonitions of the Capenates regarding their own fate should Veii fall to the Romans—*devictis Veiis bello quoque Romano se proximos fore credentes*[46]—such a need clearly existed in the years before 395 B.C. The long-anticipated invasion from Rome would have provided the motive for strengthening the defences, and it is significant that the Romans in fact failed to take the city by direct assault.[47] The theory gains strength from its agreement with the archaeological evidence. The section in the quarry shows that the lower rampart is definitely of pre-Roman origin. The blocked well over which it was built contains (below the deliberate stone packing) only Etruscan ware datable to the sixth and fifth centuries. The deposit contains no Roman pottery and during the construction of the rampart was sealed by stone packing to prevent the risk of subsidence. As far as knowledge of Etruscan impasto ware permits therefore, the lower rampart was probably built towards the end of the fifth century. This suggests a parallel with the ramparts of Etruscan Veii, about which much is now known from the excavations beside the North-west Gate.[48] In date the walls of Veii cannot be earlier than the middle of the fifth century and may well be as late as its closing decades. They are

[46] Livy, V, 8, 4.
[47] Livy, V, 24, 1.
[48] *PBSR*, xxvii, 1959, pp. 66–7, 79.

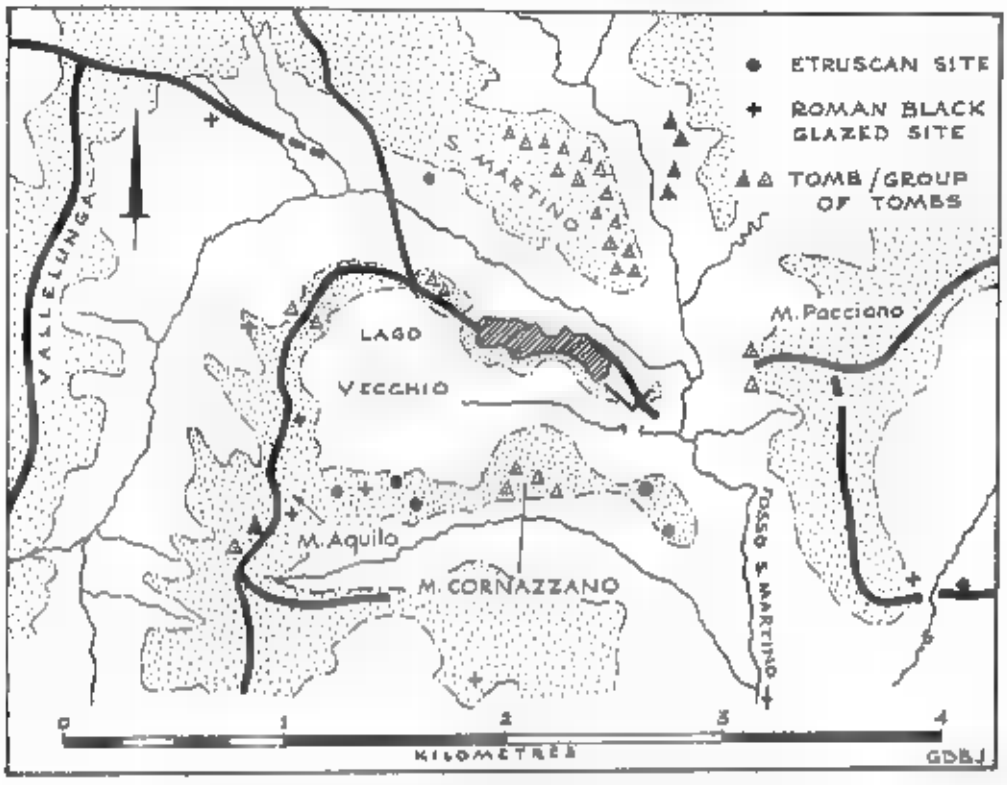


Fig. 7. Capena in the Etruscan and Early Roman Periods (*contours at 175 m.*)

the walls that defied Camillus, and the lower rampart at Capena was probably designed to meet a similar threat from Rome.

The bulk of the pottery found on the site comes from the annexe contained within the lower rampart because the topsoil has been less liable to erosion there than elsewhere. The proportionate amounts of the various wares reveal the history of the town. There is a heavy density of Etruscan bucchero and impasto wares and an equally large quantity of Roman black-glazed ware, predominantly of the third and second centuries. In contrast the amount of *Terra Sigillata* and Red Polished wares is scanty; the paucity of the later pottery types reflects the change which Capena underwent in the Roman period. With the dispersal of settlement across the countryside, the inhabitants of the town dwindled greatly in number as the relatively minute proportion of later pottery shows. Capena remained the centre of local administration, but it probably contained a greatly reduced number of private dwellings, like the site of Saepinum, which was almost devoid of all but public buildings in the Imperial period.

The 'decentralization' process which produced this result is shown to its full extent in figs. 1 and 2. By way of contrast, fig. 7 represents what is known of the state of settlement in the Etruscan and early Roman periods. Doubtless much evidence has disappeared, but the plan emphasises a basic point. The settlement of

the early Roman period was limited in size and location. It was virtually confined to the M. Cornazzano and the M. Aquila ridges, close to the road that linked Capena with the Flaminia ridge. Much of the area to the north of the city remained exclusively a cemetery zone. Like a medieval village, Capena became the centre to which one returned at dusk after the day's work in the fields. The change to the decentralized settlement typical of the later Roman period represents the same sort of transition that Italian agriculture is undergoing today at the hands of the Ente Maremma and similar land reclamation projects. Such schemes are attempting (with mixed results) to move the *contadino* from the medieval village and resettle him more economically amid the actual land that he tills.

The principal discovery in the area contained by the lower rampart was most of a black-glazed dish containing a stylised portrait of a female head. It is closely related to the type known as 'genucilia' ware, which was only produced at Cerveteri and in the Ager Faliscus (M.A. Del Chiaro, *The Genucilia Group: a class of Etruscan Red-Figured plates*, University of California, 1957); this fine example presumably comes from the latter source. It measures 30·6 cm. in diameter and the overall impression given by the black glaze set on the brown monochrome background is remarkably fresh and vivid (pl. XL, *b*; fig. 8, 3). It has a slightly concave centre and a rim with a down-turned flange. The reverse of the plate is decorated simply and effectively with concentric circles in black glaze, the outer circle being the actual rim and the next a bold, freely drawn band (3 cm. wide) enclosed in two narrow bands of lighter wash. The base rim is decorated outside and inside and the design is then repeated on the centre of the base with the last circle fading and diminishing into a whorl.

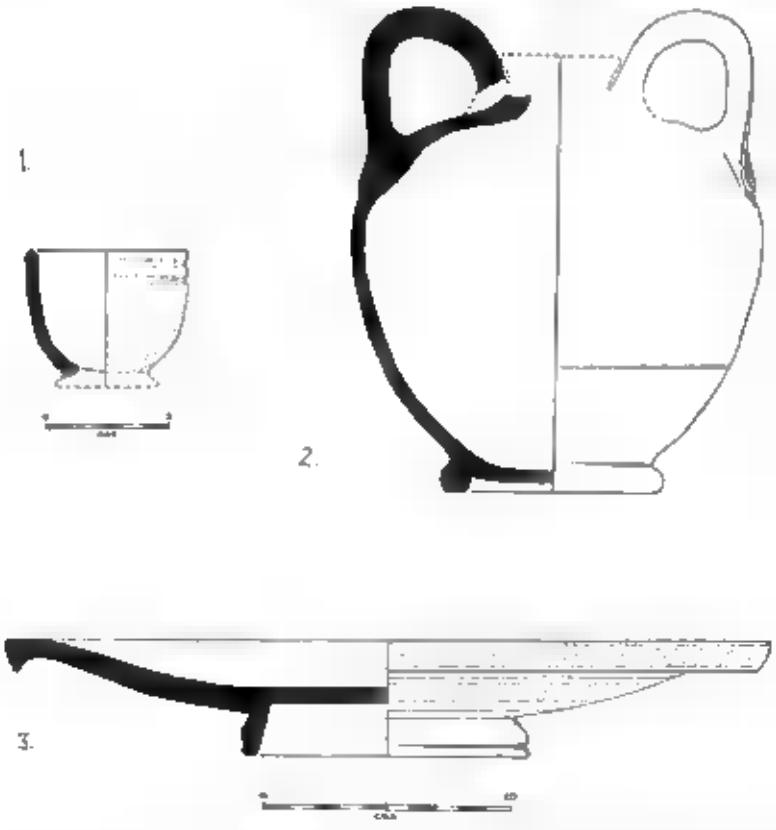


FIG. 8. POTTERY FROM THE CAPENA AREA (pp. 134, 142)

In dating the dish the important feature is the three-quarter angle at which the portrait is presented. The Campanian style of head, which is imitated in this example, is normally seen in profile and the rarity of the nearly frontal portrait dates the Capena plate to the middle of the last quarter of the fourth century. All the parallels (which seem to be Apulian rather than Campanian in origin) belong to this period. These include three works of the 'Primato' painter belonging to the late 4th century. Two are unpublished (Louvre K. 51 and Naples 2916) and the third (a mask) is now in the British Museum (British Museum, 1958, 2–14. 1; cf. *British Museum Quarterly*, 1959, pl. XXXV, p. 100 ff.). Another frontal portrait head from Taranto belonging to the third quarter of the fourth century was published in 1956 (*JdAI*, lxxi, 1956, p. 219, pl. XV). With it can be compared a similar plate that is the work of the circle of the 'Darius' painter (*Röm. Mitt.*, lxiv, 1957, p. 198, Taf. 45, 1.). It is dated to the years around 330 B.C., and the example from Capena is unlikely to be much later than this (I am very grateful to Prof. A. D. Trendall for the references in this section).

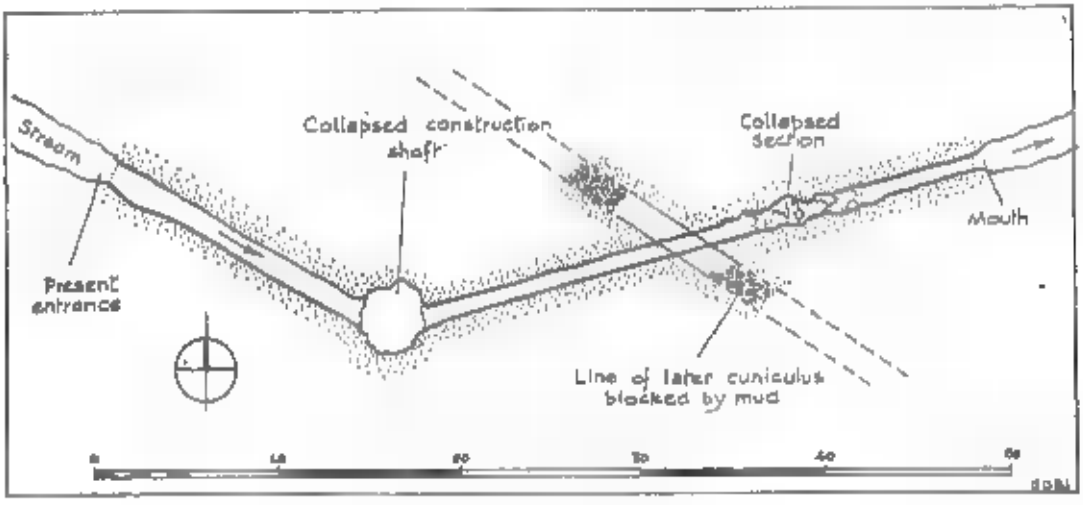


FIG. 9. CAPENA: PLAN OF *Cuniculus* ON THE SOUTH-EAST SIDE (*cf.* pl. XXVII)

In the valley floor the stream that flows from the Lago Vecchio into the Fosso di S. Martino runs underground in a *cuniculus* for a little over 50 metres (fig. 9). The upstream section (14·50 m.) follows an alignment of 105° into a construction shaft that has partly collapsed. The section of the channel at this point is broader than usual, 1·60 m. high and 1·20 wide (pl. XXVII). Beyond the construction shaft the alignment swings 30° towards the north and the channel itself narrows into the typical Etruscan shape, like a Perpendicular Gothic window in section (60 cm. wide). At 13·20 m. from the shaft the *cuniculus* is crossed by another running south-eastwards at an angle of 125°. This second channel (1·10 high and 85 cm. wide) is nearly rectangular in section with slightly inclined side walls and a flat, not a pointed, roof. Within a few metres on either side it is blocked by mud and rubble. Its purpose is a mystery, as it runs across the line of the main valley floor, but it must be earlier than the main channel which would otherwise have captured its flow. The stream continues along the main channel over a small waterfall, where a section has collapsed, and then emerges into daylight. The direction of the pick marks shows that the whole of this section was cut downwards from the construction shaft.

Cuniculi are an interesting feature of the Etruscan countryside but the factors that promoted their construction are not fully understood. Clearly they served two main functions, either to direct streams underground and so [illegible] the necessity of building a bridge, or else for purposes of drainage, preventing the erosion of valuable topsoil; in the northern Ager Veientanus, for instance, the latter is clearly the dominant factor. The *cuniculus* in question at Capena may have served two purposes. Certainly it satisfied a need by giving easy access to the western side of the Fosso S. Martino valley. Yet the *cuniculus* probably extended higher up the valley to Lago Vecchio than the present surviving section. If kept well drained, the floor of the Lago Vecchio is by far the most fertile area in the whole district and would have provided a source of food close to the ancient city. Once the drainage breaks down, the bowl-like area reverts to a shallow lake, as it did in 1944, when air-photographs shows most of the basin covered by a sheet of water which, though shallow, would effectively put the area out of cultivation. Recent clearance of the effluent channel has re-established efficient drainage and the Etruscan *cuniculus* was probably designed to serve the same purpose. By keeping the floor of the Lago Vecchio well-drained, it would have preserved the fertility of an area close to the ancient city.

(ii) *The cemeteries* (fig. 7)

Capena was surrounded by cemeteries whose extent gives a much truer indication of its size than the scanty remains on the actual site of the town. Fortunately the Etruscan cemeteries are the one aspect of the area to have received detailed study in the past and all that is attempted here is a brief summary of the location and character of each.

In outline the development of the cemeteries follows the broad pattern established by Holland among the Falisci and Colini at Veii and subsequently adopted by Akeström.[19] The earliest graves were small cylindrical shafts of the Urnfield variety (*tombe a pozzo*) containing handmade pottery of dark impasto and no imported wares. These were followed by trenched graves (*tombe a fossa*) of increasingly elaborate form; this stage saw the introduction of local wheel-made pottery, copper red ware and the beginning of local painted ware. From the *fossa* graves it was a relatively easy step to the chamber tombs (*tombe a camera*) which form the bulk of the later graves and continued in use throughout the Roman period. Such formal schemes are always subject to modification, but the broad outline has been confirmed in the two excavated cemeteries at Capena. These are the main S. Martino cemetery and the small but densely packed Colle le Saliere cemetery, on the ridge west of Capena; they were excavated by Paribeni (*Mon. Ant.*, xvi, 1906, p. 1 ff.) and Stefani (*ibid.* xliv, 1958, p. 1 ff.) respectively. There are, however, several other less important cemeteries close to the city, which are also briefly described below.

San Martino.—Extensively excavated in the first years of this century by Paribeni, *Mon. Ant.*, xvi, 1906, p. 1 ff.; cf. *Not. Scav.*, 1906, p. 178 ff. For subsequent work, see E. Stefani, *B.P.I.*, 1912, p. 147 ff.; E. Gabrici, *Mon. Ant.*, xxii, 1913, p. 121; G. Bendinelli, *Not. Scav.*, 1922, p. 110 ff. The

[19] L. J. Holland, *The Faliscans in Prehistoric Times*, p. 17 ff.; A. M. Colini, *Not. Scav.*, 1919, pp. 1–12; Å Åkeström, *Acta Instituti Romani Regni Suetiae*, iii, 1934, pp. 13–17.

San Martino cemetery, facing Capena from the northern bank of the Fosso di Vallelunga, is by far the largest of the series grouped around the town. It extends from the south-eastern tip of the San Martino ridge for over a kilometre to the north-west, as far as site **188**. Paribeni examined over a hundred graves, and many more have since been rifled by *clandestini*. Two hundred and ninety-six are traceable from surface indications, and hundreds more must be covered without trace. Only one archaic *tomba a pozzo* was located in the excavations, and this did not appear to be earlier than eighth century. The material from the later *tombe a fossa* was similar to that discovered at Falerii, Narce, Corchiano and Trevignano; *i.e.* the group of sites isolated by the Ciminian forest and the influence of Veii. In the full Etruscan period the varieties of Protocorinthian pottery discovered correspond to those found in Faliscan burials both in their forms and in their numerically small proportion to local wares.

Colle le Saliere.—This cemetery lies on a prominent ridge 200 m. from the western gate of Capena. The slightly curved crest below which ran the road westwards towards the Flaminia is *c.* 170 m. long by 40 m. wide at its broadest point. Between 1909 and 1912 Stefani excavated 194 burials and tombs densely packed within the cemetery area, and the results were published in *Mon. Ant.*, xliv, 1958, pp. 1–209. Two archaic cremation burials of the *pozzo* variety were found, but the great majority of the burials were inhumation *tombe a fossa*. The earliest of the twenty-eight *tombe a camera* belong to the seventh or sixth century and show evidence of re-use in the third and second centuries, while the latest belong to the Roman period.

Le Macchie.—The Villa Giulia collection contains random finds from the area known as Le Macchie. It lies 500 m. west of Colle le Saliere along the ridge carrying the Flaminia-Capena road towards M. Aquila. Little is visible today, but three collapsed chamber tombs are noted under site [illegible] (p. 132). Further south, at M. Aquila, tomb-groups occur at sites 7 and 8.

Monte Cornazzano.—This small cemetery east of M. Aquila occupies the crest of M. Cornazzano and a southward-facing re-entrant overlooking the Fosso delle Noci. Depressions marking collapsed tombs show the total length of the cemetery [illegible] to have been *c.* 300 m. A few finds from this area are shown in the Villa Giulia collection. Only one tomb now survives to any extent and the available material is described under site **19** (p. 134).

M. Pacciano.—The route east of C[illegible] passes through a small cemetery area in the ascent from the Fosso di [illegible]an Martino to the M. Pacciano ridge. What little is known about these Etruscan remains is described under site **207** (p. 181).

Monte Cucolo.—At the south-western foot of M. Cuculo erosion and the work of the *clandestini* have located a small cemetery area on the edge of the Fosso di S. Martino. The graves apparently belong to the *fossa* variety and the pottery [illegible] almost all Etruscan impasto and coarsewares, with a little Roman black-glazed ware. Details are given under sites **196–199** (p. 179).

(*c*) *The Morlupo–Capena* (*Leprignano*) *Area* (fig. 10)[70]

Between the villages of Morlupo and Capena–Leprignano lay two ridges that ran south-south-east from the line of the road that linked Capena with the Via Flaminia. Together they form [illegible] small topographical unit of the south-central Ager Capenas not directly linked to the Flaminia ridge. Neither ridge was used by any important ancient road: consequently they were not of any great importance, but both were occupied by a string of Roman sites described below.

The road from the Flaminia to the ancient Capena passed north of Morlupo in a very prominent cutting close to S. Sebastiano (p. 129). The ancient route is then closely followed by the modern road eastwards for a kilometre to Casale Angelo Custode. There the Roman paved road turned due north, while a five-kilometre ridge [illegible] south-south-east towards M. Cento Viole. M. Castello and M. di Morlupo form its principal crests [illegible] it runs between the Fosso di Morlupo and the Fosso della

[illegible] The medieval village of Leprignano was rechristened 'Capena' in the 'thirties. To avoid confusion with the ancient site it is [illegible] referred to throughout as 'Capena-Leprignano' or 'Capena (Leprignano).'

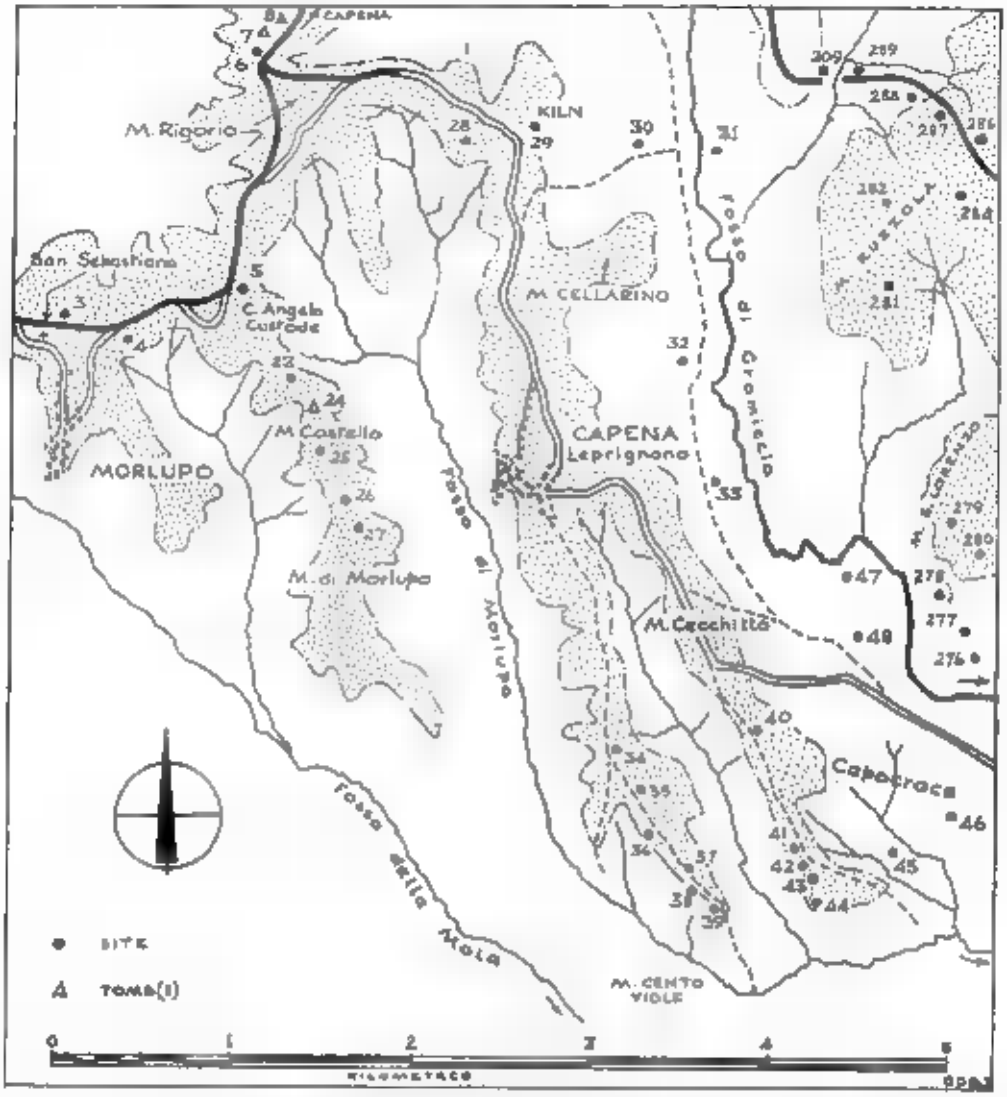


FIG. 10. THE MORLUPO-CAPENA (LEPRIGNANO) AREA (*cf.* figs. 2, 22) (*contours at 100 m.*)

Mola. The small hill (239 m.) north of M. Castello was occupied by a fairly substantial Roman site with evidence of a tessellated pavement (**23**). Two hundred metres beyond, at the foot of M. Castello, the discovery of an Etruscan impasto sherd (**24**) close to the site of a painted tomb published in *Not. Scav.*, 1907, p. 677 suggests the early settlement of the ridge. The southern tip of M. Castello proper shows traces of a small Roman site (**25**), and in the saddle between it and M. di Morlupo a tufa and mortar wall is visible in the floor of the modern track (**26**). The last available site (**27**) occurs on the northern crest of M. di Morlupo; beyond that

the ridge does not appear to have been settled. The various sites were presumably linked by a trackway similar to that in use today.

23 953693. A fairly extensive Roman building occupying the ridge-crest (289 m.) north of M. Castello.
Terra sig.; Red Polished ware; coarseware. Amph. B.T. Elongated black tesserae.

24 954691. Etruscan impasto sherd at the northern foot of M. Castello. Nearby, ■ painted tomb chamber (3·77 × 1·72 m.) ▬ discovered and published in *Not. Scav.*, 1907, p. 677.

25 955687. Small Roman site on the southern crest of M. Castello. Little pottery.
Coarseware. B.T.

26 957685. The eroded remains of a site in the saddle between M. Castello and M. di Morlupo. No pottery was found, but the present ridge-track has exposed the top of ■ wall in *tufelli* and light grey mortar (45 cm. wide).
B.T.

27 957683. Well-defined nucleus of Roman material on the northern crest of M. di Morlupo.
Terra sig.; Red Polished ware; coarseware. Amph. B.T.

A kilometre from Casale Angelo Custode, at M. Rigorio, the Flaminia–Capena road turns north along the narrow M. Aquila ridge that leads to the site of Capena. The main ridge, however, continues due east for a kilometre and then turns south for two kilometres to the village of Capena–Leprignano. It then continues south for another three kilometres to the confluence of the Fosso di Morlupo and the Fosso Pantanelle, while a south-eastern finger known as M. Cecchito extends towards the Lucus Feroniae plain.

The Capena–Leprignano ridge does show evidence of an ancient track for a short distance. In the saddle between M. Aquila and M. Rigorio the paved Flaminia–Capena road was joined by another ancient route skirting the northern flank of M. Rigorio, first ■ a broad terrace and then in a shallow cutting *c.* 4 m. wide. It can be traced eastwards for about 700 m. before coinciding with the line of the modern road to Capena–Leprignano. There is no trace of this ancient route further south, and the short stretch near M. Rigorio is best regarded as the start of a rough trackway that linked the sites along the ridge.

The first of these (**28**) is a medium-large site on a small hill-top west of the modern road at Km. 6. It was in existence during the Republican period, contained tesselated pavements and was in part constructed in tufa ashlar. Three hundred metres to the east lay the site of an important pottery-kiln (**29**), the only one so far identified with certainty in the Ager Capenas. A number of features associated with the kiln are visible in the side and floor of a narrow track that runs north-east from the modern Capena (Leprignano)–Morlupo road. Thirty metres from the road the traces of a room can be seen in section in the eastern side of the track-cutting. In section it appears in the shape of an elongated U with a floor 2·60 m. across and walls 0·65 and 0·75 m. to the left and right respectively. The floor and walls (0·50 m. thick) are built of rough *tufelli* and grey mortar throughout. The floor is 0·40 m. thick and traces of a corner surviving along the exposed edge of the floor show that the end wall of the room has been destroyed by the track at this point.

Thirty metres further up the track from these remains, a line of tiles stretching for 76 cm. and then turning through a right-angle suggest the square firing-chamber of a kiln. Immediately beside them lay the fragments of a fine dish in Red Polished

ware; it is 24 cm. across and rests ■ ■ base of 9·5 cm. diameter. The occurrence of this ware (often called '*terra sigillata chiara*')[71] shows that the kiln operated during the late Imperial period. From ■ previous reference it is known that the kiln produced also small jars with cylindrical necks that date from the late Republican period.[72] The life of the pottery, therefore, lasted at least two centuries.

There must have existed sites south of the kiln along the ridge to Capena-Leprignano but the modern road and intensive cultivation have removed all traces. The town itself shows no trace of antiquity.

A number of Roman sites ■ visible, however, in the broad valley of the San Martino (Fosso di Gramiccia) east of the town. This valley-bottom settlement is not ■ strange as might first appear. The valley is quite different in character from others in the area; in contrast to the normal steep V-shaped profile, the valley in question appears more saucerlike in section, with a comparatively wide floor suitable for cultivation and settlement. The reason for this is geological; the fresh-water shells and molluscs that can be found exposed in the hillside below the site of Capena show that during the late Quaternary period much of the valley was under water. In fact it formed an arm of the so-called Tiber Lake (p. 118), extending north-west from the present line of the Tiber valley. These conditions left the Fosso di Gramiccia valley with a bowl-like profile and ■ floor sufficiently large to allow settlement. The most noteworthy site (**30**) lies due east of the kiln (**29**) and it is overlooked by the northern spur of M. Cellarino. A heavily overgrown structure in the centre of the site is probably a cistern. Four hundred metres to the east, on the opposite bank of the stream, lies the scatter from a medium-sized site (**31**). A little over ■ kilometre to the south there is the prominent building-platform of a large 'villa rustica' (**32**) at the south-eastern end of M. Cellarino, where the Valle Mortolana joins the main valley. Close to the river ■ few hundred metres away a small nucleus of Roman material (**33**) perhaps represents the site of an outbuilding attached to the main site (**32**).

28 963706. Medium-sized site occupying ■ lateral spur S.W. of Km. 6 of the Morlupo-Capena Leprignano road.
Black-glazed ware; coarseware. Amph. Tufa ashlar; *selce* blocks; coarseware.

■ 966705. The pottery-kiln described in the section above. Also found on the site were ■ large variety of coarseware, with a high percentage of wasters, and glass (incl. window glass). For details, see *Not. Scav.*, 1907, p. 732.

30 973705. The remains of a site on the west side of the Fosso di S. Martino north of M. Cellarino. The heavily overgrown building in *tufelli* and mortar occupying the centre of the site is roughly 4·50 m. square and was probably ■ cistern. It is not possible to examine the interior of the structure.
Terra Sig. B.T.

31 977704. Thin scatter of pottery and building material 400 m. from site 30 on the eastern bank of the Fosso di S. Martino.
Coarseware. B.T.

[71] For detailed studies v. N. Lamboglia, *Rivista di Studi Liguri*, vii, 1941, pp. 7–22 and xxiv, 1958, pp. 257–330.

[72] 'olle a collo cilindrico di piccolo diametro con i soliti manici che si collegano alla sommità del ventre.' *Not. Scav.*, 1907, p. 732.

32 975693. The building-platform of a large site, at least 70 × 50 m., at the S.E. end of M. Cellarino, where the Valle Martolano flows into the Fosso di S. Martino. The site in fact belongs to the small group of large 'villae rusticae' (cf. **241**), but unfortunately all traces of walls have been destroyed and little pottery could be found, none of good quality.
Coarseware. B.T.

■ 977686. Small nucleus in a field immediately west of the Fosso di Gramiccia (= Fosso di S. Martino). Probably an outbuilding of some kind.
Coarseware. Tile.

South of Capena–Leprignano an unpaved track runs south through thick vineyards along the ridge past the church of La Madonna. There is no trace of an ancient site for over one and a half kilometres. Then at Spot-height 181 m., where a small track descends to the Fosso di Morlupo, two walls belonging to site **34** can be seen in section on the eastern side of the track cutting. From this point traces of ancient settlement follow in rapid succession. Two small sites (**35, 36**) lie to east and west of the track respectively. Four hundred metres further on a small nucleus of pottery (**37**) is visible in the sides of wheel-ruts that have formed in the track. Due south of this, on a lateral spur overlooking the Fosso di Morlupo, lies the major Roman building of the ridge (**38**). The site is a surprisingly rich one considering the area and yielded a variety of marbles and painted wall-plaster. Three hundred metres south-east the last lateral spur above the valley was occupied by another substantial site (**39**), the walls of which have been partly exposed by recent ploughing.

South of the first site (**34**) the pattern of settlement along the ridge is more or less what one would expect, and the major site of the ridge (**38**) yielded a wide range of pottery through several centuries of continuous occupation. On the other hand it is disappointing that nothing was found closer to the town of Capena–Leprignano itself. Undoubtedly sites must have existed, but the strips of vineyards and intensively cultivated fields running south from the town along the ridge have destroyed or hidden the traces. The ridgeway track shows no signs of very great antiquity and, though the sites must have been linked by this route, in its present form it represents a medieval road linking Capena with the Ponte Storto ▬ the Fosso Cento Valli.

34 971671. Substantial site at a modern track-junction, with two walls revealed in section in the side of the track-cutting. The walls are both 45 cm. wide, one being built in rough tufa ashlar, the other in a mixture of tile and *tufelli*.
Terra sig.; Coarseware. Amph. B.T.

35 973669. Small, poor site that yielded a little black-glazed ware: it lies on the ridge-crest immediately east of the modern track.
Black-glazed ware. B.T.

36 974667. Wide scatter of pottery with a nucleus a few metres west of the present track.
Red Polished ware; coarseware. Amph. B.T.

37 976664. Small nucleus of pottery below the surface of the modern trackway. The sherds appear in section in the track-ruts and have not been washed down by recent water action.
Black-glazed ware; coarseware.

38 977663. The major site of the ridge, occupying a western spur overlooking the Fosso di Morlupo. Every ploughing produces a large variety of good Roman material.
Black-glazed ware; *terra sig.*; Red Polished ware; coarseware, including thin-walled ware. Marble. Red, blue and green painted plaster.

39 977662. Medium-sized site on the final lateral spur of the ridge above the Fosso di Morlupo. Some ancient walling has recently been revealed by ploughing.
Red Polished ware; coarseware. Amph. B.T.

South-east of Capena–Leprignano a finger-like ridge runs across M. Cecchitto towards the southern corner of the Lucus Feroniae plain. No ancient site was found in the heavily cultivated fields close to the present town. At M. Cecchitto the modern road linking Capena–Leprignano to the Flaminia turns due east and leaves the ridge, while a rough track continues along the ridge-crest. This section yielded in all five sites, the first (**40**) on a small crest to the east of the present track, the rest clustered together a kilometre to the south-east. Of the latter the most northerly (**41**) contained a large quantity of *opus reticulatum*, not in the familiar tufa but in limestone. Site **42** straddling the ridge yielded a wide variety of good-quality pottery, while the absence of pottery at its close neighbour (**43**) suggests that the site in question was an outbuilding of some kind. The southernmost building located (**44**) occupied the tip of a spur overlooking the confluence of the Fosso Pantanelle and the Fosso di Morlupo.

North-east of this ridge the ground is bisected by two nameless streams and then rises gently to the shelf of Capocroce. A small site (**45**) was located on the ridge between the two streams and another (**46**) among the thick vineyards of Capocroce, which probably conceal traces of other ancient settlement.

In the valley east of M. Cecchitto and north of the Capena (Leprignano)–Tiberina road two extensive scatters of pottery (**47, 48**) were found on a shelf of travertine overlooking the Fosso di Gramiccia. Neither yielded any significant amount of good-quality pottery.

979673. Site on a small ridge-crest east of the present track.
Red Polished ware; coarseware. B.T.

41 [illegible]. Medium-sized site on a lateral spur.
Red Polished ware; [illegible] Amph. Limestone reticulate. *Op. spic.*

42 983665. Medium-small building with a rich pottery yield immediately west of the ridgway track.
Terra sig.; Red Polished and thin-walled wares; [illegible] Amph. Limestone rubble.

983664. Ridge-crest site with extensive limestone building rubble.
Coarseware. Amph. B.T.

983663. Small nucleus on the far tip of a lateral spur.
Coarseware. Amph. B.T.

45 987666. Very poor Roman site on a ridge between two nameless streams S.W. of Capocroce.
A small scatter of brick and tile.

46 991688. Sparse but extensive scatter of Roman material from a nucleus on the southern edge of Capocroce.
A large quantity of coarseware. B.T.

47 984681. Distinct nucleus of Roman pottery and building debris on a shelf of travertine overlooking the Fosso di Gramiccia.
Red Polished ware; [illegible] Amph. B.T.

986677. Scatter from a small site 400 m. south of site 47, on a travertine shelf half-enclosed by the Fosso di Gramiccia.
Coarseware. Amph. B.T.

(*d*) *The Monte Palombo Area* (pls. XXVIII, XLII)

South-east of the modern town of Castelnuovo di Porto a group of ridges demarcated by the Valle Chiarana and the Fosso Cento Valli extends towards the western side of the Tiber valley. The main ridge, formed by M. la Pera, M. Fischio

and M. Sette Monti, runs south-east for five kilometres towards Fontanile di Vaccherecia, where a convenient spur offers a gradual descent into the Tiber valley west of Ponte Storto. It is divided by the Valle Muta from a slightly longer (6 km.) ridge that also runs south-eastwards and separates from the main group at M. la Pera. Its highest point is formed by M. Palombo, which gives its name to the area; from it the two ridges of Acquabianca and Muleranca continue in easterly and north-easterly direction respectively and end in a series of low bluffs overlooking the flood plain of the Tiber.

The area is as yet hardly touched by modern development. A metalled road is slowly being built more or less along the line of the paved Roman road from the Via Flaminia to Ponte Storto. Otherwise tufa-quarrying is the only non-agricultural activity in the area, but this has paradoxically revealed more than it has destroyed. The net result is that, in comparison with other regions of the Ager Capenas, a disproportionately large amount of evidence has accumulated; in particular, this is one of the very few areas outside the immediate neighbourhood of Veii where the volume of Etruscan material available permits a coherent picture to be formed of settlement in that period. Accordingly the various phases of settlement will be treated separately.

(i) *Etruscan Settlement* (fig. 11)

The flat-topped bluffs overlooking the Tiber plain offered several admirably defensible positions strongly reminiscent of small promontory forts, and it is two such sites that traces of major Etruscan settlement were found. The less important of the two occupied the spur which later became the medieval site of Grotta Colonna A (**66**) overlooking the Tiber valley, whereas its more important neighbour lay on the tip of the ridge above Fontanile di Vaccherecia over a kilometre up the Valle Muta (Site **49**) (pl. XXIX, *b*). The site occupied the last, wedge-shaped spur of a ridge which runs south-east from M. Sette Monti; it was defended on its upper side by an artificial ditch (which has now been enlarged by erosion), and a wall in massive tufa blocks. More of the defensive enceinte has recently been revealed by quarrying on the north-eastern side of the site. In fact the whole settlement is slowly being demolished, but not before the quarrying operations have revealed underground *cuniculi*, storage pits and (Roman) cisterns lined with *opus signinum*. Its dimensions cannot now be reconstructed with accuracy but were probably *c.* 175 m. × *c.* 90 m. at its widest point.

North-west of the settlement, on the ridge which climbs to M. Sette Monti, was found an Etruscan tomb (**50**), and beyond it stretch a series of Etruscan sites (**51, 52, 53, 54, 55**), most of which continued to be occupied in the Roman period. Little but bucchero and impasto pottery sherds survives from these early nuclei, and finds of daub at site **53** probably indicate that the sites were occupied by huts. Beyond site **55**, on the northern flank of M. Sette Monti, there is no further ridge settlement and it cannot now be shown that the trackway continued up the ridge towards the line later followed in the Roman period by the Via Flaminia. The only early site in a north-westerly direction occurs at the right-angle bend in the narrow ridge north-west of M. Palombo (**56**). There some bucchero sherds indicate occupation of what later became an important Roman site.

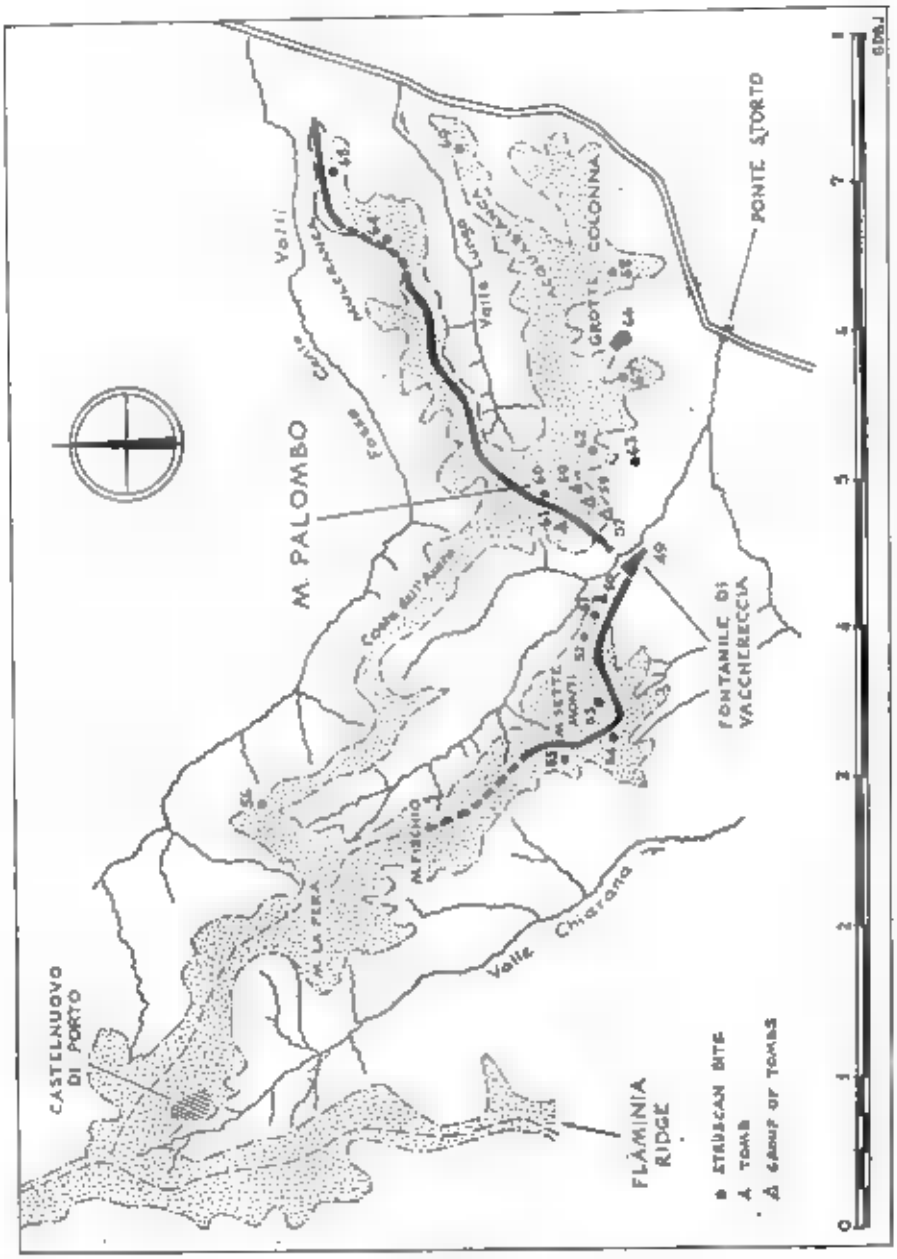


FIG. 11. MONTE PALOMBO: SETTLEMENT IN THE ETRUSCAN PERIOD (*cf.* fig. 13) (*contours at 100 m.*)

One tomb (**50**) was found above the settlement; but the main cemetery belonging to the Fontanile di Vaccherecia site lay not on the M. Sette Monti but across the Valle Muta on the south-westerly spur of M. Palombo. Heavy scatters of early pottery associated with burials and including Italic painted ware (sixth century B.C.) cover the spur (sites **57, 58**). Towards the crest of M. Palombo erosion has recently caused the collapse of a tomb revealing a chamber with three funerary couches of the normal Etruscan pattern (**59**) (fig. 12). Further scatters of bucchero and impasto wares (**60, 61**) probably indicate that the cemetery also extended on to the crest of M. Palombo and the south-west spur. To the south-east, two nuclei of Etruscan material probably represent actual settlements (**62, 63**).

The corollary of the existence of this early settlement on M. Palombo is that the road which linked it with the site at Fontanile di Vaccherecia also belongs to the Etruscan period. This route climbs a lateral gully of the Valle Muta and emerges on to the ridge-crest immediately west of M. Palombo in a well-marked cutting. The line ▬ continued on the northern side of the ridge by a 200 m. cutting which has been eroded almost out of all recognition. It led directly on to the Muleranca ridge, where the route was later incorporated in the Roman track system; in fact the cutting in the northern slope of M. Palombo was probably already heavily eroded even in the Roman period, and this may explain why, in the later system, two other cuttings were formed to link up with the Muleranca ridge-route. The road continues along the ridge towards Muleranca for over a kilometre and a half in a series of well-marked cuttings. Then it disappears for a short section due south of Ponte S. Cristina, but re-appears in a cutting along the eastern flank of Muleranca. Both at that point and in the lost section, sites with early pottery (**64, 65**) confirm that this line of communications ▬ in use during the Etruscan period. Nor is there lack of an obvious destination; the Muleranca ridge offers the most direct line to Lucus Feroniae, a site which is known to have been in existence during the regal period at Rome (Livy, 1, 30) and which lies only a kilometre beyond the end of the Muleranca spur.

Though much of the evidence has again been lost in quarrying, the settlement already mentioned at Grotta Colonna A (**66**) seems to have formed a miniature version of the Fontanile di Vaccherecia settlement. It, too, occupied the tip of a highly defensible, pear-shaped spur and was probably protected, as it certainly was in medieval times, by a ditch on the upper side. Medieval and modern quarrying has removed almost all the evidence from the surrounding area, but stray Etruscan sherds show that the two adjoining spurs were also occupied in some way in the pre-Roman period (sites **67, 68**). If fuller evidence were available, they would probably appear as peripheral sites of the main settlement at (**66**).

A stray impasto sherd (**69**) shows that the far tip of the Acquabianca ridge, overlooking the later line of the Via Tiberina, was also occupied at this time.

49 981638. The major settlement of the area. An Etruscan, Roman and medieval site occupying the final spur of the ridge from Castelnuovo above the modern Fontanile di Vaccherecia.

Etruscan: burnished impasto; bucchero.

Roman: black-glazed ware; *terra sig.*; Red Polished ware; red coarseware. Glassware. Veneer marble; black and white tesserae; red wall plaster.

Medieval: coarseware (incl. strap handles).

The features visible on the site belong to all these periods of its occupation—Etruscan, Roman and medieval. The defensive wall is probably Etruscan or early Republican; it is best seen in a 32 m. section beside the ditch on the upper side of the site. It is built of unmortared tufa blocks (av. size *c.* 48×58×30 cm.) with a total width of 1·46 m.

A further small section of the defensive wall was brought to light on the north-eastern side by quarrying in December 1960. Two stretchers were uncovered resting on a slightly offset socle. The wall at this point was 1·27 m. wide and ran at an angle of 329°. The same quarrying level also revealed in its upper face two Roman cisterns with *opus signinum*-lined walls. Both were choked with debris and are not in a measurable position. The same applies to a storage pit and two other underground chambers, which appear in the vertical face of a quarry-floor worked during 1959.

A *cuniculus* entrance can be seen in the south-western side of the site beside the present track. It is of the normal Etruscan pattern, 50 cm. wide and 1·40 m. high, and can be traced underneath the settlement for *c.* 35 m., at which point it is choked by dried mud.

50 970639. Site on a small, prominent knoll immediately north of the present track, with a recently rifled tomb on the summit. The pottery is from the tomb. At the foot of the slope lie some tufa blocks.

Impasto ware; bucchero. Black-glazed ware.

51 969640. An extensive Etruscan and Roman site on the eastern slopes of the main ridge.

Etruscan: impasto ware.

Roman: black-glazed ware; *terra sig.*; coarseware. Dolium. Veneer marble frags.; white tesserae; *op. spic.*; *op. ret.* Rotary millstone.

52 967641. Thick deposit of Etruscan and later material covering the hill-crest immediately north of the modern track.

Etruscan: archaic cooking-stand; impasto ware; bucchero.

Roman: black-glazed ware; *terra sig.*; Red Polished ware; coarseware.

On fringe of site: 1 sherd of jar with cream-coloured internal slip: dated to *c.* 420–390 B.C. at Veii; also a loomweight.

53 96441. Site with a considerable amount of Etruscan and black-glazed pottery on the eastern slopes of a knoll due east of M. Sette Monti.

Etruscan: burnished impasto ware; bucchero.

Roman: black-glazed ware; *terra sig.* Tile, daub.

54 958640. Small Etruscan nucleus below the crest of M. Sette Monti.

Burnished impasto; black-glazed ware; coarseware.

55 957643. Site in an orchard a little below the new road-cutting.

[illegible] bucchero sherds. Roman coarseware.

56 955663. Important site on the ridge leaving the line of the Roman road at M. La Pera and running south-east to M. Palombo. It lies beside the line of the ancient track where the ridge makes a right-angle bend.

Bucchero. Black-glazed and thin-walled wares; *terra sig.*; Red Polished ware; coarseware. Veneer marble; coarse grey tesserae. Glass.

57 974640. Heavy scatter of material from burials on the tip of the S.S.W. spur of M. Palombo.

Burnished impasto; Italic painted ware; bucchero; red burnished ware with vertical fluting (*c.* [illegible] century B.C.). Black-glazed ware.

58 975641. Important scatter of early pottery from a burial on the upper slope of the S.S.W. ridge of M. Palombo.

Burnished impasto; bucchero. Black-glazed ware.

59 976642. Etruscan tomb with a collapsed roof on the S.S.W. spur of M. Palombo (fig. 12).

On main funerary couch: fragments of 3 bucchero vessels, one of them a loop-handle beaker.

Elsewhere in debris: impasto; bucchero, painted ware.

60 977644. Heavy scatter of pottery on the S.W. slope of the crest of M. Palombo. The site yielded no building material and, like its neighbours, is probably associated with graves.

Etruscan: burnished impasto; bucchero.

Roman: black-glazed ware; *terra sig.*; Red Polished ware; coarseware.

61 974643. M. Palombo: a scatter of early pottery on the S.W. spur.

Impasto and black-glazed wares.

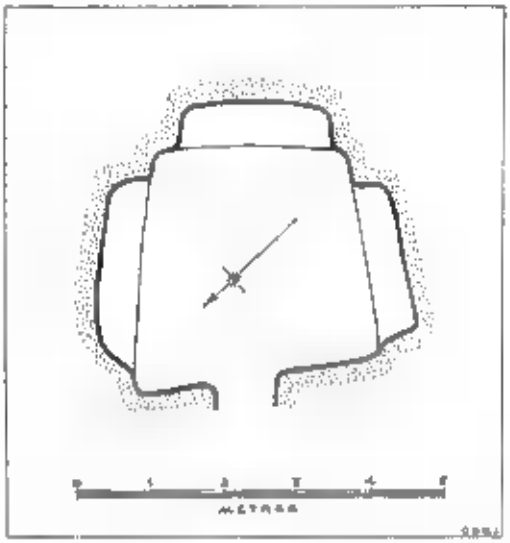


FIG. 12. MONTE PALOMBO: PLAN OF TOMB AT SITE 59

62 980642. Etruscan site under grass on a small hill immediately west of the large road-cutting S.E. of M. Palombo.
Burnished impasto; Italic painted ware; bucchero. Also black-glazed ware.

■ 978638. Site on the southern slope of the spur S.E. of M. Palombo.
Etruscan: bucchero.
Roman: *terra sig.*; Red Polished ware; coarseware. B.T.

64 993653. Small nucleus on the N.W. slope of Muleranca. An archaic jar handle; coarseware.

65 995657. Extended scatter under grass on the flat-topped hill-crest east of Muleranca beside the road cutting:
Archaic (early Etruscan) coarseware. Red Polished ware.

■ 988637. The spur on which lies the medieval site of Grotta Colonna A. It is now being destroyed by quarrying. Storage-pits revealed in section along the present quarry face.
Etruscan: red impasto ware; coarseware.
Roman: black-glazed ware.
Medieval: glazed and unglazed ▬ B.T. Bone. (v. p. 164).

67 987636. Small scatter of material on the heavily-ploughed eastern slope of M. Fiore, indicative of a site ▬ the crest.
Coarse impasto sherd; coarseware.

68 992637. Pottery found on the promontory beside Grotta Colonna Tower B, in heavily ploughed area.
Etruscan: 1 sherd of coarseware. *Roman*: Red Polished ware.
Medieval: glazed and unglazed wares.

69 000649. Site with evidence of Etruscan occupation on the far tip of the Acquabianca ridge, 1 bucchero sherd. Also *terra sig.*; Red Polished ware; coarseware. Amph. B.T.

(ii) *Roman Settlement* (fig. 13)

The development of the countryside in the Roman period saw a corresponding growth in communications. The pattern of Etruscan settlement was primarily

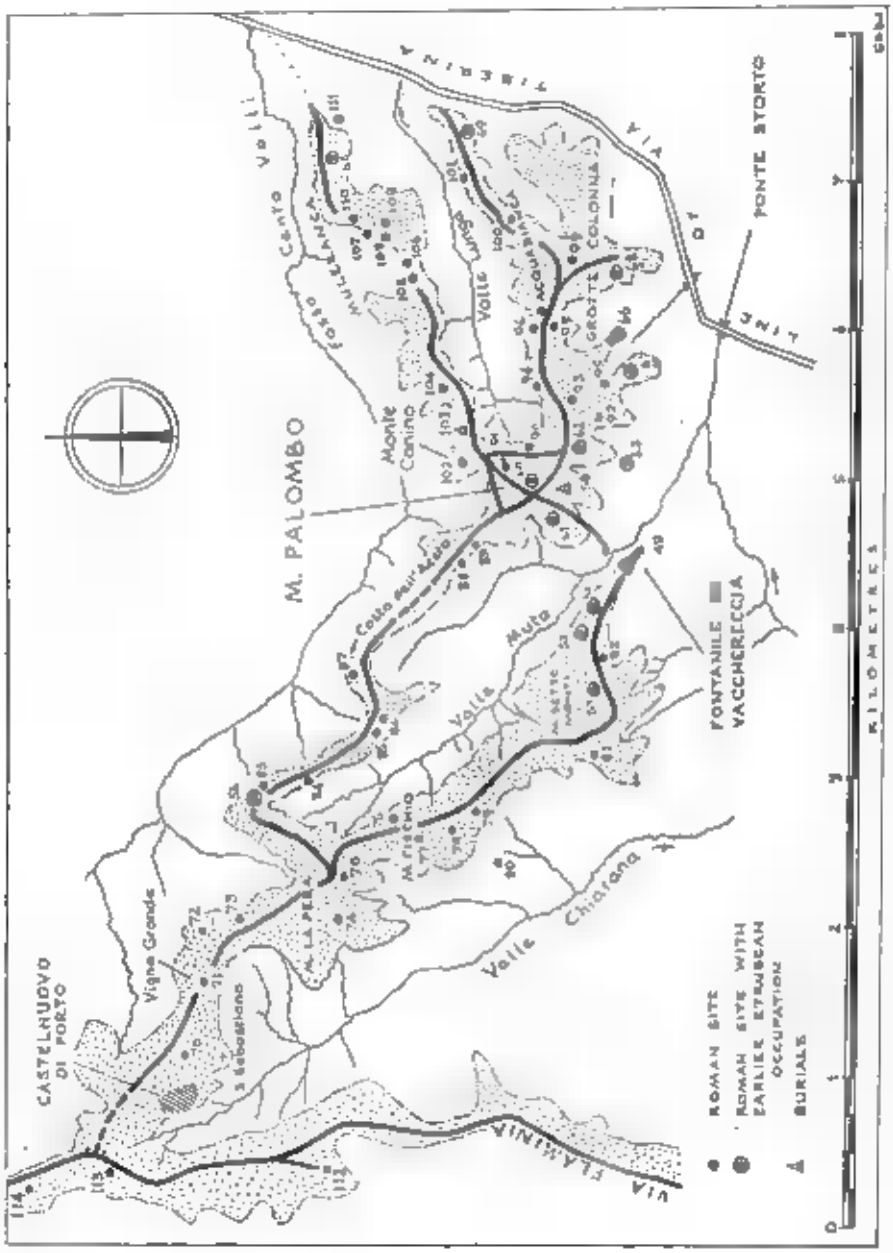


FIG. 13. MONTE PALOMBO: SETTLEMENT IN THE ROMAN PERIOD (*cf.* fig. 11) (*contours at 100 m.*)

limited to the east, to the ancient route roughly followed by the line of the Via Tiberina, though it is probable that some kind of track ran north-west from the main site above Fontanile di Vaccherecia. The construction of the Via Flaminia (220 B.C.), however, created a new focus for settlement to the west; this brought into relief a physical factor ▬ which the Etruscan settlement was not designed to capitalize. The M. La Pera–M. Fischio–M. Sette Monti ridge is the only ridge in the area which offers easy and relatively direct communication between the Flaminia and the Tiberina. Accordingly a paved road was constructed, which branched south-east from the Flaminia a few hundred metres north of the modern town of Castelnuovo, and which can be traced to the major site at Fontanile di Vaccherecia (**49**), whence no doubt it continued to join the Via Tiberina near the Ponte Storto area. This route had one disadvantage, however; the last section to the Tiberina lies along the muddy valley floor and communications must at times have been difficult. This may have been a factor promoting the growth of another important road, which left the main route at M. La Pera and turned through a right-angle on to the narrow, northern-western ridge of M. Palombo. It does not ever seem to have been paved, but it ran the whole length of the M. Palombo ridge along the Acquabianca spur and so to the Tiberina. The road involved no stream-crossing and may at times have been preferred to the paved route. The presumed Etruscan road running north-east along the Muleranca ridge was incorporated in the system and both that ridge and the Acquabianca ridge had a heavy concentration of sites.

The Flaminia–Tiberina link road.—The paved Roman road left the Flaminia ridge 200–300 m. north of the modern town of Castelnuovo di Porto and traces of it are first seen immediately south of the ridge-crest amid a group of newly-built houses. A line of scattered *selce* blocks marks the ridge north-east of the town, and it is continued down the flank of the ridge by an overgrown terrace as far as the area known as Vigna Grande. The ridge-summit is occupied by a Roman building (**70**) containing the remains of a barrel-vaulted substructure with an *opus spicatum* pavement above and *opus reticulatum* and brick facing in position. In the saddle of the Vigna Grande lies the site of an extensive villa that has been noticed by several earlier writers (**71**).

The modern road from here for the next kilometre approximates very closely to the Roman line; the only significant divergence occurs where it climbs to cross the northern shoulders of M. La Pera. There ▪ 100 m. of ancient cutting diverged to the left and, at the far end of it, high in the present face of the cutting, several *selce* paving blocks lie *in situ*. Two small sites (**72, 73**) flank the northern side of the road and a third (**74**) occupies the southern spur of M. La Pera. The main site of the area, however, lay beside the road in a saddle south-east of the hill (**75**); it is notable for the remarkable variety of late Roman pottery which it yielded.

At this point the paved road is committed to the ridge between the Valle Chiarana and the headwaters of the Valle Muta. The ridge narrows considerably and much ancient material together with the road itself has been or is being destroyed by the construction of a metalled service road from Castelnuovo. A small cluster of sites was, however, located where the ridge temporarily broadens at M. Fischio and where the ancient road-cutting is still visible. Site **76** occupies a knoll to the north,

while sites **77, 78** and **79** lie on the platform-like crests of M. Fischio; site [illegible] stands isolated from the main group on the tip of a long spur overlooking the Valle Falciosa, a tributary of the Valle Chiarana. South-west, towards M. Sette Monti, the narrowness of the ridge discouraged settlement and there is a blank for over half a kilometre, though traces of the Roman road, whether in the shape of short sections of cutting that have escaped erosion or scatters of *selce* paving blocks, can still be seen. On M. Sette Monti sites re-appear; the northern slope was occupied by a medium-sized group of buildings (site **81**). The road at this point enters dense *macchia* and much evidence may be permanently lost in this area. The actual course of the paved road, however, is tolerably clear. It swings left under the crest of M. Sette Monti in a broad overgrown terrace and then enters a deep cutting. The final descent to Fontanile di Vaccherecia is largely lost in the heavily eroded southern side of the spur. Two Etruscan sites [illegible] to have been left unoccupied, but in the rest (sites **51, 52, 53**) occupation was continuous. They became large Roman centres and a new site (**82**) appeared on a knoll to the south of the road overlooking the descent to the main settlement (**49**), which continued to flourish throughout the period.

70 938670. Roman building on the tip of the ridge overlooking the chapel of San Sebastiano. There are also the remains of a barrel-vaulted substructure with *op. spic.* pavement, as well as of *op. ret.* and brick facing in position.
Coarseware. Veneer marble; painted wall-plaster.

71 943667. The very large 'Vigna Grande' site in the ridge-saddle east of San Sebastiano.
Black-glazed ware; *terra sig.*; Red Polished ware; coarseware. Glass. White and blue tesserae; painted wall plaster. Split column in 'cipollino' marble (Italian), fragments of *opus sectile* and veneer marble.
A brief notice of the site in *Not. Scav.*, 1929, p. 258, mentions various other features that were then visible. They include a white mosaic with a dark border, polychrome stucco cornice frags., *opus sectile* marble frags. and a marble sarcophagus. The site had attracted attention before; v. Ashby and Fell, *JRS*, xi, 1921, p. 152.

72 947667. Scatter of brick and tile on a small hillcrest due east of the 'Vigna Grande' site. Perhaps an outbuilding.

73 948663. Scatter of brick and tile on the small hill-top immediately east of the road-cutting on the northern side of M. La Pera. Perhaps an outbuilding.

74 947658. Scatter of material on the S.W. shoulder of M. La Pera.
Black-glazed ware; *terra sig.*; Red Polished ware; coarseware. B.T. Grey tesserae.

75 949659. Very rich deposit of material from a Roman building at the head of the valley to the east of M. La Pera, about 50 m. below the Roman and modern road. The site is remarkable for its numerous varieties of Red Polished wares.
Black-glazed ware; *terra sig.*; Red Polished and thin-walled wares; coarseware. Glass. Amph. Dolia. B.T. Black and white tesserae; painted wall-plaster; veneer marble frags.

76 952655. Eroded site east of the modern track. Tufa blocks are all that remains of the structure, and the pottery is very scattered.
Black-glazed ware; *terra sig.*; Red Polished ware. Glass. B.T. Tufa ashlar; *op. sig.*; grey tesserae.

77 951653. Site on the crest and eastern slope of M. Fischio, overlooking the line of the ancient road.
Black-glazed ware; *terra sig.*; Red polished ware; coarseware. Amph. B.T. Black and white tesserae.

78 952651. Small nucleus on a newly ploughed hill S.W. of the ridge-road.
Black-glazed ware (1 sherd); coarseware. 1 green-glazed handle (medieval ?). B.T.

79 954649. Roman site on a low ridge above the present track, beside which are exposed in section walls of *tufelli* and a floor in *op. sig.*
Red Polished ware; coarseware. 2 travertine doorsills. 1 glass fragment with tesserae.

■ 951648. Ploughed-out site on the tip of the S.W. spur of M. Fischio.
Terra sig.; Red Polished ware. Amph. Glass. B.T. Reticulate *tufelli*; *op. sig.*; grey tesserae.

81 957640. Roman site under grass ■ the northern slope of M. Sette Monti.
Terra sig.; Red Polished ware; coarseware. B.T. Tufa ashlar; grey tesserae.

82 965641. Remains of a Roman building on the eastern slopes of a knoll overlooking the present descent to Fontanile di Vaccherecia.
Black-glazed ware; *terra sig.*; Red polished ware; coarseware; glass; much tufa ashlar; painted wall plaster; grey tesserae.
Along with the main settlement above Fontanile di Vaccherecia (**49**), sites **51, 52, and 53** continued to be occupied during the Roman period.

The Monte Palombo ridge-road.—This important route diverged from the paved road immediately south of M. La Pera and turned sharply north-east through a right-angle towards M. Palombo. It first appears as a heavily eroded terrace dropping down to the important site (**56**) and its presumed outbuildings (**83**). Site **56** yielded evidence of Etruscan occupation and continued to be occupied throughout the Roman period; it formed the most important unit in the north-western section of the ridge. The road runs on along the crest of the ridge, past a series of small nuclei (**84, 85, 86**); like almost all the other sites in this section, they lie under thick grass and have never been ploughed. Consequently the amount of ancient material available is very limited and the size and date of these sites cannot at present be determined.

The road swings down to the north-western end of the narrow Costa dell'Aceto in a broad, curving cutting. North of it lies a small site (**87**) ■ ■ convenient hill crest: otherwise the extreme narrowness of the ridge in this section would have discouraged settlement for over a kilometre. Erosion has carved it into a virtual knife-edge and all traces of the road itself have been washed away. Close to M. Palombo, however, the ancient ridgeway re-appears in a shallow cutting beside a pair of medium-sized sites which lie under a thick covering of grass (**88, 89**). The route is continued immediately south-west of the crest by a series of deep (3 m. in some places) cuttings, which cross the line of the early road from Fontanile di Vaccherecia at right-angles. In this area the Etruscan sites **58, 60, 61** and ■ show evidence of continued use in Roman times, though the occupation of the two last-mentioned did not extend beyond the Republican period. At the same time two fresh Roman sites (**90, 91**) appeared on the eastern and northern slopes of M. Palombo respectively.

The ridge here divided into two spurs, the Muleranca and Acquabianca ridges. The main ridgeway continued along the latter, while the early route along Muleranca was incorporated in the road-system by means of a triangular junction. The two routes and the settlement associated with them will be discussed separately.

Site **56**, which yielded evidence of Etruscan occupation, continued to flourish throughout the Roman period and formed the most important farm-unit in the north-western section of the ridge.

83 956662. Small pocket of material from the crest of the ridge N.W. of M. Palombo. At most the site represents an outbuilding of that at 955663 (**56**).
Flange tile: curved tile. Tufa ashlar.

84 957659. Very small nucleus S.W. of the M. Palombo ridge road. It lies under grass.
Roman coarseware. Tile; *tufelli*.

85 959656. Roman site under heavy overgrowth on the ridge N.W. of M. Palombo.
Coarseware. B.T. Grey and white tesserae.

86 959655. Medium-sized site under grass on the S.W. side of the M. Palombo ridge road.
Roman coarseware. B.T.

87 964656. Small nucleus of Roman material under grass beside the M. Palombo ridge track at the N.W. end of the Costa d'Aceto.
Coarseware.

88 971651. Site beside the M. Palombo ridge road at the S.E. end of Costa d'Aceto. Unfortunately it lies under thick grass and little pottery was available. A reticulate wall and an *opus spicatum* floor overlaid by a later concrete pavement are visible in section.
Coarseware; one illegible and fragmentary brick-stamp.

89 972650. Site largely lost under thick grass on the ridge-crest beside the line of the ancient track. No pottery found, only brick and tile.
In the immediate vicinity sites **58, 60, 61** and **63** show evidence of use in the Roman period, the last two only during Republican times.

90 978645. Small Roman nucleus on the eastern side of the summit of M. Palombo.
Terra sig.; [illegible] Glass. B.T.

91 977645. Nucleus of Roman material on the northern tip of M. Palombo.
Red Polished and coarseware. B.T.

The Acquabianca branch of the Monte Palombo ridge-road.—From M. Palombo the main ridge-route continued eastwards along the Acquabianca ridge in a very prominent series of cuttings (*a*. pl. XXIX, *b*, and the air photograph reproduced in pl. XLII). Three hundred [illegible] of the actual crest of M. Palombo the road is joined by another running up from M. Canino in a shallow cutting and so forming the eastern side of a triangular road-junction. Beyond the junction a deeply-entrenched cutting nearly 5 m. high on one side curves along the ridge-crest past the Etruscan site (**62**) mentioned above (p. 155). In the heavily-ploughed land to the south scatters of pottery survive from four Roman sites grouped around the lateral spur that leads to Ponte Storto (**92, 93, 94, 95**). At site 67 on the tip of the spur, and at the important nucleus at Grotta Colonna A (**66**), occupation continued into the Roman period. In the case of the latter it is important to note that the presence of only black-glazed ware shows that this occupation [illegible] not extend beyond the Republican period and that the small Etruscan nucleus was abandoned as decentralized Roman settlement spread along the ridges. On the main ridge due north of Grotta Colonna A two sites (**96, 97**) lie immediately north of the road. Below them another nucleus survives with part of a tile floor still visible (**98**). A small collapse has revealed the entrance to the underground cistern that served the site; it is described in the notes. Two hundred metres to the east a small branch-road swung south along the ridge that leads towards the medieval site of Grotta Colonna B. The road itself is not traceable as far as this, but scattered sherds show that Etruscan settlement (**68**) continued into the Roman period at this point. Meanwhile the main route turned gently north along the Acquabianca ridge proper, passing a much-ploughed site (**99**) on a spur to the south. In this section the road runs along a broad terrace beside a well-preserved nucleus (**100**). Tesserae, glass and painted plaster show that the building was of some importance. To the north-east the ridge narrows; little of the road survives [illegible] the ground, but its continuation shows clearly on air photographs. After four hundred metres it passed the remains of another fairly substantial building (**101**), which was partly constructed in *opus reticulatum*

and produced quantities of *opus signinum*, presumably from a destroyed cistern. On the tip of the ridge all trace of the road is lost soon after a small Etruscan site **(69)** that shows evidence of continued Roman occupation. The route must have joined the line of the Via Tiberina within a few hundred metres, before the crossing of the Vallelunga stream.

92 981639. Site of a Roman building on a spur south of the main ridge.
Red Polished ware; coarseware. B.T. Concrete debris.

■ 982642. Slight scatter on a flat hilltop above the cutting of the ridge road.
One Red Polished sherd; coarseware.

■ 984645. Medium-sized Roman site ploughed out north of the M. Palombo ridge road.
Black-glazed ware; *terra sig.*; Red Polished and grey barbotine wares. Coarseware. Glass. Amph. Dolium. Tufa ashlar. B.T. Small grey tesserae; *op. sect.*

95 985638. Scatter of Roman coarseware sherds on the northern flank of M. Fiore.

■ 988644. Small nucleus beside the M. Palombo ridge road.
Black-glazed ware (2 sherds); coarseware.

97 989644. Roman site ploughed out south of the M. Palombo ridge.
Black-glazed ware; *terra sig.*; thin-walled ware; coarseware. Amph. B.T. Blue glass tesserae. Lamp fragments.

98 988643. Roman site south of the M. Palombo ridge road. A tile and mortar floor is still *in situ* and an underground cistern survives immediately below the site.
Black-glazed ware; *terra sig.*; coarseware.
Below the site part of the hillside has collapsed and revealed an underground cistern. The twin curving arms of the storage chamber form an interesting plan. The 3 cm. lining of waterproof *opus signinum* is largely intact and the passages can be explored to their full extent. That on the right as one enters runs in a gentle curve for 6·45 m. under the hillside. The end wall was neatly finished with rolled corners. The left-hand chamber ran in a straight line for 6·01 m. until the point where a small collapse had revealed the underside of tile flagging in part of the building above. A small surviving fragment of a rolled corner shows that the cistern ended at this point too.

99 995640. Site lost under crops on a crest of the Acquabianca ridge.
A handful of Roman coarseware.

100 996648. Medium-sized site on the Acquabianca ridge.
Black-glazed ware; *terra sig.*; Red Polished ware; coarseware. Dolium. Glass. Travertine doorsill; black and white [redacted]e; red and yellow wall-plaster.

101 998645. Medium-sized site under grass on the Acquabianca ridge.
Black-glazed ware; *terra sig.*; coarseware. *Op. ret.*; *op. sig.* (from cistern ?).
The Etruscan sites at **66, 67, 68** and **69** all show evidence of Roman habitation but the main site (**66**) at Grotta Colonna (A) does not appear to have been occupied beyond the Republican period.

The Mulerana branch of the Monte Palombo ridge-road.—The isolated hill that forms the western end of the Mulerana ridge was known as Monte Canino. The remains **(102)** that appeared on the surface attracted attention and the site was excavated by Pallottino in 1934. The results, published in *Not. Scav.* for 1937 (p. 7 ff.), showed that the site had first been occupied in the Republican period (fig. 14).

The main building on the site was a farm-building of early Imperial date that contained the remains of a wooden press (*torcularium*). It was later joined by a rectangular building with an *ambulacrum*, which later came to be used for burials. The burials and several column-capitals show that the building continued to be occupied till the eighth or ninth century, and the site is almost certainly to be identified with the church of S. Cristina mentioned in a papal decree of 794.[78]

[78] Tomassetti, *La Campagna Romana*, iii, p. 286.

In the saddle east of M. Canino ■ scatter of roof-tile and human bone marks the area of a small Roman cemetery (**103**). The cemetery is paralleled on the eastern side of Lucus Feroniae (p. 197) and is a feature of the poorer sections of the Ostian cemetery at Isola Sacra. The road can be traced in a shallow cutting towards the north-east, but there is a gap before the next site on a lateral spur (**104**). It was occupied by an extensive and architecturally pretentious building, to judge from several column bases, engaged columns and doorsills lying in the undergrowth. Unfortunately the area has been little ploughed and ■ good-quality pottery was found. The ancient road-cutting continues north-eastwards, but there is a long and puzzling gap of nearly a kilometre before the next group of sites on the upper shoulder of Muleranca. The gaps to either side of the site stand in marked contrast to the general density of settlement, especially along the rest of the ridge. Taken with the size of the site itself, this suggests that one is here dealing with an estate that lay astride this section of the ridge. The suggestion is not capable of direct proof, of course, but instances of estates larger than normal farm-holdings must have existed, and this is the most plausible example in the Ager Capenas.

The shoulder south-west of Muleranca yielded sites in profusion, though the precise course of the road is lost. Two (**105, 106**) were found close together on the narrow ridge-crest while another four (**107, 108, 109, 110**) lie clustered around an overgrown cistern on the southern side of Muleranca. The road terrace re-appears along the northern edge of Muleranca and ■ small amount of Red Polished ware shows that the Etruscan site **65** on the crest continued to be occupied during the Roman period. All trace of the ancient road is lost after ■ cutting on the northern slope of the last finger of the ridge above Casale Tocchi; it must have joined the line of the Via Tiberina within ■ few hundred metres, before the crossing of the Fosso Cento Valli. On the slope above the *fontanile* west of the *casale* are the remains of a substantial Roman site (**111**) which, from the pottery evidence, was occupied from the Republican to the late Imperial period.

102 978650. M. Canino. The structures on the hill were excavated by Pallottino in 1934 and published in *Not. Scav.*, 1937, p. 7. A plan of the excavations is reproduced in fig. 14. The buildings belong to three basic periods. Late Republican black-glazed ware associated with a tufa ashlar wall running across the site shows that it was the earliest feature of the complex; its function, however, was not discovered. This was joined in the early Imperial period by an important *villa rustica* in *opus reticulatum*; additions to the plan and architectural pieces such as stucco columns and a wide variety of marbles testify to the prosperity of the building and its inhabitants. It possessed, among other features, a wine press in the south-western wing. At the same time the area was used as a burial ground, like much of M. Palombo to the south. By the late Empire the focus of the burials had moved away from the villa a little to the east and was concentrated in and around a rectangular building with an *ambulacrum* that was ultimately filled with burials. Most of the *villa* continued to be occupied for some time, while graves and sculptured column-capitals show that the rectangular building was in use at least until the eighth century, and probably later. The site still poses many questions, in particular the unexpectedly large amount of sculpture and epigraphic material. The rectangular building too is puzzling, but can almost certainly be associated with the church of S. Cristina mentioned in a Papal document of 794 (Tomassetti, *La Campagna Romana*, iii, p. 286). A bridge across the Fosso Cento Valli below the site is still known as Ponte S. Cristina (989661).

■ 980650. Scatter of Roman coarseware on the slope east of 'Monte Canino,' associated with a group of Roman tile-burials.

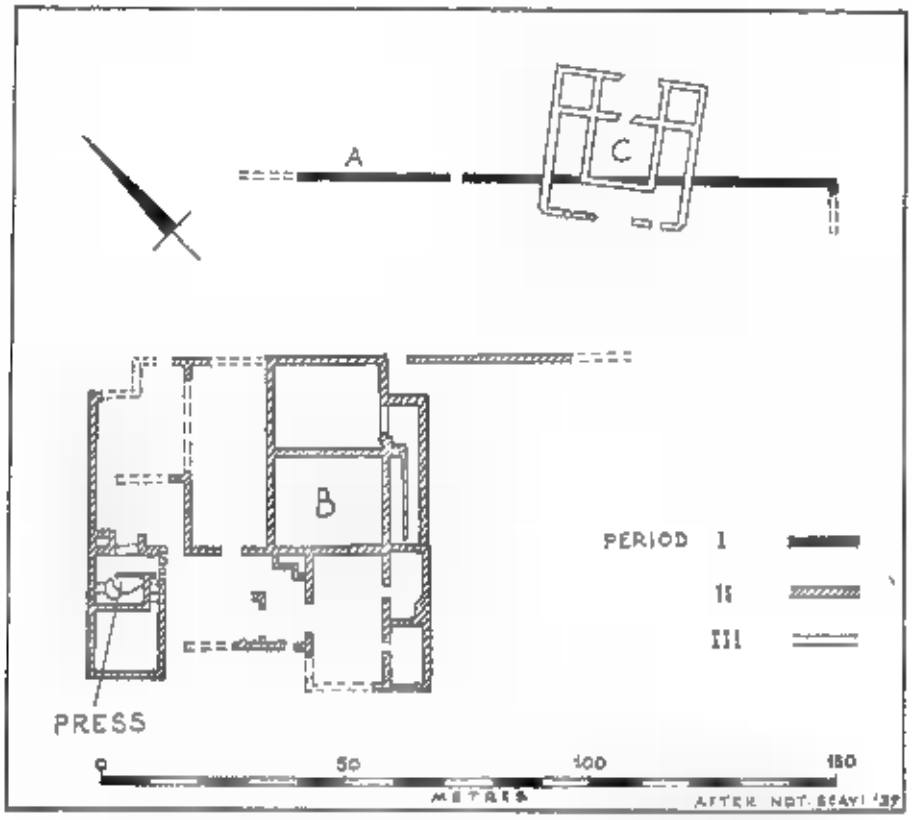


FIG. 14. MONTE PALOMBO: BUILDINGS EXCAVATED ■ 1934 ON MONTE CANINO

104 983651. Major site occupying the ridge-crest alongside the road running N.E. from M. Palombo. Unfortunately the area has been little ploughed and no good quality pottery was found.
Roman coarseware. Black and white tesserae; grey and red wall plaster.

105 Roman building occupying a saddle in the ridge above Muleranca. Mainly building material survives.
Red Polished ware; coarseware. B.T. Grey tesserae.

106 991652. Large site on the N.W. side of the ridge above Muleranca.
Black-glazed ware; Red Polished ware; coarseware. B.T.

107 993695. Medium-sized site on the northward-facing slope above Muleranca.
Black-glazed ware; *terra sig.*; Red Polished ware; coarseware; incl. one base stamped ANH. Amph. B.T.

108 993654. Pottery scatter around an overgrown hole (probably a cistern) ■ the southern slope of the ridge above Muleranca.
Roman coarseware.

■ 994654. Small nucleus ■ the ridge above Muleranca. It is ■ little above the large site of 993655.
Black-glazed ware; coarseware.

110 994656. Scattered site ■ the S.W. shoulder of the ridge above Muleranca.
Black-glazed ware; *terra sig.*; Red Polished ware; coarseware. B.T.

111 001657. Substantial Roman site on the hillside above the *fontanile* S.E. of Casale Tocchi.
Black-glazed ware; *terra sig.*; Red Polished ware. Amph. B.T.

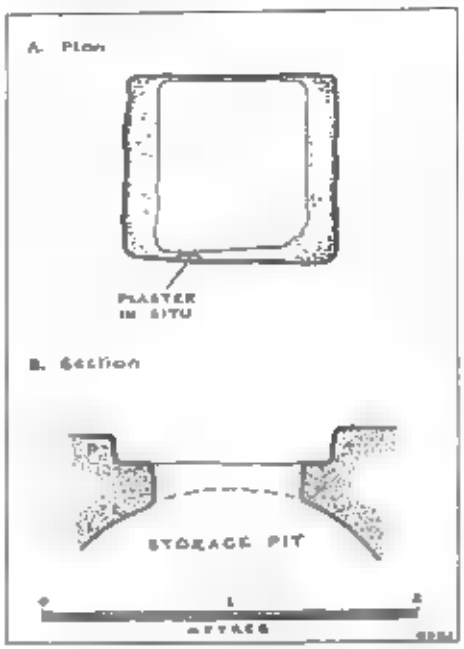


FIG. 15. MEDIEVAL STORAGE PIT AT GROTTA COLONNA A (p. 164) (*cf.* pl. XXX, *a*)

(iii) *Medieval Settlement*

The area under discussion is one of the few zones in the Ager Capenas where the medieval remains are interesting and significant—interesting because of the amount of information available, and significant because of the historical lesson they emphasize. In principle they represent a return to the type of settlement found during the Etruscan period (p. 151), which were in effect 'promontory forts' sited on the tips of truncated ridges overlooking the Tiber valley or its tributaries. In the medieval period the two main Etruscan sites, Fontanile di Vaccherecia and Grotta Colonna A, were occupied as well ■ the neighbouring Grotta Colonna B, a site with very similar characteristics overlooking the flood-plain of the Tiber. The tactical advantages of these positions ■ obvious and it is clear that in the choice of sites during both Etruscan and medieval times a premium was placed on the simple factor of defensibility. In contrast stands the dispersed settlement that developed during the Roman period. This area illustrates better than anywhere else in the Ager Capenas how great a change in character the stability of a central authority produced.

Fontanile di Vaccherecia.—There is little to say except that the site was occupied in the medieval period; this is clearly shown by the amount of medieval pottery available, including several examples of strap handles. The traces of medieval settlement were the first to be destroyed by the present tufa quarry. An important Papal document of A.D. 794 describing the area of Riano lists the site as *Castrum Baccaricias* (Tomassetti, *La Campagna Romana*, iii, p. 286, cf. p. 35).

Grotta Colonna A.—The medieval settlement on this small spur re-occupied a position inhabited in the Etruscan and early Roman periods (pp. 153, 160). It has suffered the same fate as its larger neighbour, Fontanile di Vaccherecia, and has now been completely destroyed by tufa quarrying.

In 1960, however, it was still possible to recover some information when several storage-pits were exposed in section. The site lies on a N.W.–S.E. axis at ▬ angle of 140° and seems to have been roughly oval in shape (approx. 29·50 m. × 19·50 m., though the width was certainly greater). An air photograph taken in 1943 shows that the vulnerable north-western end, where the site is attached to the ridge, was protected by ■ ditch, but all trace of this has now disappeared. The most interesting features were the storage pits revealed as the quarrying proceeded (pl. XXX, *b*). They were all oval, flask-shaped pits cut in the bed tufa, and a random example measured 1·80 m. deep × 2·20 m. at the greatest width. The opening was rectangular (fig. 15; pl. XXX, *a*), measuring 1·12 m. × 1·01 m. in the example explored, with an inset lower ledge to receive a capstone. A mortar fragment adhering shows that the capstones were sealed in position, strongly suggesting that the storage pits contained not water but grain.

Grotta Colonna B.—The third and last of the medieval sites occupies the truncated spur to the east of the last-mentioned settlement. Unlike it, however, the area had not previously been occupied. The site takes the form of a 'promontory fort,' 160 ▬ long by 45 m. wide, with its axis lying at approximately 157°. At the upper end a defensive ditch and wall provided protection from the main ridge, and the wall contains the stump of a tower in coarse *tufelli* and mortar. As at the neighbouring site there ▬ storage pits cut in bed tufa, five in all, set in a row at an angle of 67°, 33 m. from the remains of the tower. Unlike some other medieval settlement in southern Etruria (*e.g.* Belmonte, 2 km. S.W. of Castelnuovo) the inhabitants did not live in rock-cut chambers. There is a considerable amount of medieval brick and tile from structures that originally filled the interior of the site.

For the medieval church of S. Cristina, ▬ p. 162.

(*e*) *The Via Flaminia* (figs. 1, p. 130, and 13; pl. XXXII)

The course of the Via Flaminia along the western edge of the Ager Capenas has been accurately described by Ashby on several occasions (esp. *JRS*, xi, 1921, p. 125 ff., esp. p. 151 ff.).[74] There is no need, therefore, for another description here, since rather more of the road was then visible than it is today. It corresponds very closely with the modern route along the narrow, winding ridge that took the Flaminia from Prima Porta to the river Treia with only one small stream-crossing at Ponte Ritorto,[75] south-east of Civita Castellana. In the section described here, from Castelnuovo di Porto to Rignano Flaminio, the chief point of interest is the pair of sites (**120, 122**) which have yielded evidence of Etruscan occupation, strongly suggesting that the route was in use long before the time of C. Flaminius. The sites in question both lie close to Stazione Magliano, where an important ridge to the west (p. 135) carried the line of the ancient road to Veii and the Ager Veientanus. Theoretically, one would expect the Flaminia to be pre-Roman in origin. Of the three natural routes that radiate northwards from Prima Porta the other two were both in use during the Etruscan period,[76] and one would suppose that the Flaminia followed the same historical pattern. The Etruscan sites near Stazione Magliano now provide confirmation on the ground.

An arbitrary start to the survey was made at M. d'Arca, a kilometre south-west of Castelnuovo di Porto, where a paved *diverticulum* from the Via Flaminia led to a very extensive ancient building (**112**). Apart from two important sites (**113, 114**) there is little of interest to the north until the site of *ad Vicesimum* (**1**) at the junction

[74] See also T. Ashby, *The Roman Campagna in Classical Times*, p. 250 ff.; E. Martinori, *Via Flaminia*, 1929, p. 67 ff.

[75] M. H. Ballance, 'The Bridges of the Via Flaminia,' *PBSR*, xix, 1951, pp. 78–117.

[76] The Via Tiberina and an unpublished road running north-north-west in the direction of M. Aguzzo.

with the ridge road to Capena (p. 128). Five hundred metres further north ■ nucleus that was partially excavated in the early years of this century (**115**) was claimed as a temple. At the junction with the Vallelunga ridge the Flaminia swung due west, past site **116** and due north again beside site **117**, opposite the modern Stazione Magliano. It is here that the Flaminia ridge is joined by the east-west ridge followed in its later stages by the ancient route from Veii. Paved sections of this road have been found in the Sorbo crater to the south-west and traces ▬ intermittently visible along the ridge ■ the Flaminia at Stazione Magliano. Three sites lie close to the road junction; ▬ (**118**) contains several architectural fragments and may perhaps represent a small temple. The other two, one Roman (**119**) and one Etruscan (**120**) in date, both occupied a northern spur of the east-west ridge. Half ■ kilometre away, beside a tomb-core close to the Flaminia (**121**), lay the other much larger site (**122**) with traces of Etruscan occupation. The narrowness of the Flaminia ridge in this section discouraged settlement, and the next site (**123**) is overlaid by Casale Morolo ■ kilometre and a half to the north. After another kilometre ■ prominent mound to the left of the road marks the site of a building (**124**) which Ashby identified ▬ the *Villa Rostrata* of the Antonine Itinerary. On the opposite side of the road lies a tomb-core (**125**) overlooked by ■ third nucleus on the slope of M. Cerasa (**126**). Several sections of the original *selce* paving are preserved over the next few kilometres of the Flaminia and site **127** ▬ found beside one such section of paving at Km. 37. There must have been other sites, but these have been destroyed by the fast growing roadside settlement south of Rignano Flaminio. Below the town, however, ■ tessellated pavement shows that the site of S. Abbondio (**128**) was occupied during the Roman period. Altogether the ancient settlement of the Flaminia ridge ▬ rather sparse. The narrowness of the actual ridge may have accounted for this is some places, but the basic reason lies in the historical role of the Flaminia, as a trunk route with no organic relationship to the problems of local settlement (see further, p. 178).

There is evidence to show that a small settlement must have existed on the site of Rignano Flaminio in antiquity. A number of shaft and chamber tombs from as early as the eighth century have been found ▬ M. Casale south-west of the town, while forty-eight inscriptions from the Christian cemetery of Theodora prove activity in the late Classical period.

112 929659. Very large site on a hill overlooking the Flaminia, immediately west of the track to Belmonte. The original approach lay along a paved *diverticulum* from the Flaminia; many of the *selce* blocks survive. The building is typical of several very substantial sites lying close to road in the section to the south.

Terra sig.; Red Polished and coarse wares in a wide variety. Amph. and dolium (one fragment had been cracked in antiquity and mended with lead). Yellow and red wall plaster, and *tesserae* from three separate mosaic floors: (i) fine white *tesserae*; (ii) ▬ black and white *tesserae*; (iii) ▬ grey *tesserae*. *Opus sectile* pavement; *op. spic.* (individual bricks 11·5 × 5 × 2 cm.); *op. sig.*; reticulate *tufelli*. ▬ of tufa and travertine ashlar and ■ quernstone in leucitic basalt. B.T. and a travertine doorsill (59 × 43 × 18 cm. deep). Fluted column fragment in Luna marble and forearm of statue figure, also in Luna marble.

113 930673. A suburb of Castelnuovo di Porto has grown up on the Flaminia beside the Osteria Posta. To the south the present road runs in a shallow cutting and a Roman wall is visible in section on the western side. It is built of *tufelli* and dark brown mortar. No other traces of the site to which it belonged are visible.

▬ 928679. Site in the garden of a house occupying ■ small spur to the west of the Flaminia.

Terra sig.; coarseware. Amph. Reticulate *tufelli*; veneer marble, white *tesserae*, and painted wall plaster.

I 928688. *Ad Vicesimum*. The hill of Madonna della Guardia is now occupied by the church of Madonna della Guardia and its associated buildings. It has generally been identified with the site of *ad Vicesimum* mentioned in the Peutinger Table (Ashby, *op. cit.*, p. 153; Tomassetti, p. 293; H. Nissen, *Italische Landeskunde* ii, p. 371. The site is also noted on the Vicarello cups and the Jerusalem Itinerary). It corresponds exactly with the distance and there is nothing improbable about the site. Unfortunately most of the hill has been laid out in terraced vineyards and the ancient site virtually destroyed. Only a slight amount of Roman material survives.

Terra sig.; Red Polished and coarse wares. Amph. B.T.

115 926695. Five hundred yards to the north is the area known as Il Muraccio to the east of the road (now lost under the modern roadside settlement rapidly developing at the *bivio* to Morlupo), the scene of the excavations at the beginning of the century. It was claimed as the site of a small Republican temple on the evidence of terracotta fragments, which included a relief of the fi[illegible] century B.C. depicting the Corybantes drowning the cries of the infant Zeus (Paribeni, *Not. Scav.*, 1913, p. 382). Christian remains including a catacomb have also been found in the area (De Rossi, *Bull. Arch. Crist.*, 1883, p. 119. *Ann. Inst.*, 1883, p. 253).

116 923697. Substantial site on the western edge of a northern spur of the main Flaminia ridge.

Black-glazed ware; *terra sig.*; Red Polished and coarse w[illegible]. Amph. Reticulate *tufelli*; black and white tesserae and [illegible] grey tesserae from two separate tessellated pavements.

117 918695. Site beside the Flaminia at Stazione Magliano, [illegible] Km. 32.

Red Polished and coarse [illegible] Limestone doorsill.

118 913693. Ploughed-out remains of an important site on a slope south of the Campagnano road. It is distinguished by architectural fragments in tufa, eight pieces of a tufa cornice of identical dimensions. According to persistent reports a marble statue [illegible] found at the site and disposed of by local *contadini*. The statue apparently represented a female deity and it is tempting [illegible] identify the site as a temple.

Red Polished and coarse wares. Amph. Dolium. B.T. (incl. curved tile); reticulate *tufelli*; tufa ashlar, and light fragments of a tufa cornice, 39 cm. high and a vertical projection of 26 cm.

119 910968. Small Roman nucleus on a ridge projecting northwards from the Campagnano road. The stream beside the site runs in a *cuniculus* for a short section.

Terra sig. and coarseware. Amph. B.T. Reticulate *tufelli* and *op. sig.*

120 910699. Small scatter of pottery indicating an Etruscan site, below the Roman nucleus mentioned above (**119**).

Bucchero and burnished impasto wares. Archaic tile.

121 915702. Tomb-core immediately to the west of the Via Flaminia. The monument originally stood to a height of 5·50 m. and in plan is approximately 7·20 m. square. The core is mainly composed of coarse *tufelli* and dark grey mortar, but fragments of amphorae and *opus spicatum* are also visible in the fill. Nearby lies a fragment of much-worn Luna marble, presumably from the original facing.

122 916702. On the opposite side of the Via Flaminia from the tomb (**121**) are the remains of [illegible] extensive site, with evidence of occupation in both the Etruscan and Roman periods.

Etruscan: Bucchero and burnished impasto wares; part of an archaic cooking stand.
Roman: Black-glazed ware; *terra sig.*; Red Polished and coarse wares. Blue glass tesserae.

123 914717. The important estate centre of Casale Morolo to the east of the Flaminia undoubtedly occupies an ancient site, though only a few sherds now remain.

Red Polished and coarse wares. Amph. B.T.

124 912729. Prominent mound to the west of the Flaminia containing the remains of a Roman building. A cistern (3·25 m. wide) is visible in section, and its interior was lined with *opus signinum*. Ashby suggested that the site may represent the *Villa Rostrata* of the Antonine Itinerary. The only evidence for identification is the rough agreement in distance with the itinerary (Ashby, *Memorie*, End Map).

125 912734. Small tomb-core in coarse *tufelli* and mortar, 4·90 m. from the western kerb of the Via Flaminia. It measures 4·90 m. × 3·60 m. in plan and stands to approximately 2·30 m. above present ground level.

126 Site on the side of M. Cerasa, north of site **124**, overlooking the Flaminia.
Coarseware. B.T. Amph.

127 916742. Nucleus of Roman material at Km. 37·0, beside an intact section of ancient paving. A large amount of black-glazed ware was found.
Black-glazed ware; *terra sig.*; coarsewares. Glass. Amph. B.T., incl. triangular brick; coarse grey tesserae.

128 932760. S. Abbondio. Fragments of a black and white tessellated pavement, partly overlaid by medieval masonry, show that the [illegible] was occupied in the Roman period. The church itself will not be discussed here.
The early Christian remains found near Rignano Flaminio are outside the scope of the present report. They have been described by De Rossi, *Bull. Arch. Crist.*, 1883, p. 119 ff.
The earliest discoveries at Rignano Flaminio were made on M. Casale south-west of the town where *pozzi*, *tombe a fossa* and *tombe a camera* dating from the eighth century were located (for the excavations v. *Not. Scav.*, 1912, pp. 75–81; *ibid.* 1914, pp. 265–81). Tiles inscribed with names in the Faliscan dialect have also been found in the area (*CIE*, II, 2(i), 8429–8448). There is no record of any independent municipal organisation in the Roman period, but one inscription mentions a *magister* who may have belonged to the *pagus* or *vicus* formed by the community (*CIL*, XI, 3931). A total of 48 Christian inscriptions has been found in the cemetery of Theodora (*CIL*, XI, 4028–4075). This and the other Christian remains of the area have been described by De Rossi, *loc. cit.*

(*f*) *The Flaminia Ridges* (fig. 1, p. 130; pl. XXXII)

The characteristic erosion of the volcanic tufa deposits of which most of this countryside is composed, into a series of narrow ridges separated by steep-sided valleys, is nowhere more strikingly exemplified than in the area east of the Flaminia ridge, south of Rignano Flaminio (pl. XXXII). Here the Fosso di S. Martino and its tributaries, the Fosso di Vallelunga and the Fosso della Mola d'Orciano, have created five finger-like ridges, which project either east or north-east from the main Flaminia ridge. Of these the Vallelunga ridge is the longest (5½ km.) followed by the M. Puledro, Morolo and Montelarco ridges; the short (3 km.) but archaeologically important M. Forco ridge is the smallest of the group. All the ridges, especially Vallelunga, were heavily settled in antiquity. On three of them ancient ridgeways can still be traced for some length, and it is reasonable to suppose that some form of trackway originally existed along all of them.

This broken area, close to the site of ancient Capena, forms the western section of the central Ager Capenas, and three of the ridges were linked to Capena by a cross-country road that follows a switch-back course across three valleys. Though the details are lost in the valley floor, it must have diverged from the main northern road from Capena [illegible] the north bank of the Fosso di Vallelunga. It then climbed the eastern flank of Vallelunga in a well-marked cutting (*c.* 3 m. deep on the south side), ran across the crest of the ridge and plunged down to the floor of the Fosso della Mola d'Orciano in a huge, overgrown cutting, at times over [illegible] m. deep. The details of the valley-crossing are again lost through erosion, but the line of road is continued by a cutting that climbs to a small saddle in the Morolo ridge, four hundred metres from the final spur. The cutting continues [illegible] the far side of the ridge down to the Fosso Montano and, though there is little to be seen on the ground, air photographs suggest a probable continuation that climbed the eastern slope of [illegible] small side-valley of the M. Puledro ridge. The width of the road had already decreased when it reached the Morolo ridge and, though there is no evidence

at the moment to show that it joined the Flaminia, it may have formed a short-cut to Narce during the dry season.

The ancient settlement of this group of ridges is described below; the main Flaminia ridge has been discussed above.

The Vallelunga Ridge.—The prominent route which followed the line of the Vallelunga ridge leaves the Flaminia at Km. 31·1 (a few hundred metres south-east of Romitorio) and follows a north-easterly course to a point west of Capena. Thanks to its accessibility, it is one of the few previously recorded features of the area of the Capena road system[17] and proves to have been thickly lined with Roman sites. The road is visible throughout as a prominent ridgeway, paved with *selce* blocks for the first 2 km. of its course. Site **129**, on a cone-shaped crest to the left of the track, overlooks the junction with the Flaminia; below it, in the left-hand bank of the track, several paving blocks are exposed *in situ*, and a persistent, often dense, scatter of *selce* blocks continues for the next 2 km. to site **132**. After passing through a substantial cutting, the track then emerges on to the main ridgeway. The next site (**130**) lies on the slope of a low ridge to the right of the road and just before it there is a short section of paving exposed *in situ* with both kerbs intact (width 2·10 m.). Site **131** on the crest of the very prominent ridge of M. Grugnanello has now been ploughed and drastically eroded, while only a fluted tufa column marks the original position of its close neighbour (site **132**); the pottery and building-material associated with the structure have spilled down the eastern slope of the ridge, which falls away very steeply at this point. The last certain traces of the paved road still *in situ* occur 200 m. short of this pair of sites; only a few scattered *selce* blocks are to be found beyond this point and the paving probably did not extend any further. It represents a service track to the group of important farms which developed in proximity to the Flaminia. That the expense of road-building could be undertaken is clear proof of the relative prosperity of these sites, and a paved access-road linking a group of important villas on the southern slopes of M. Aguzzo offers a close parallel from the Ager Veientanus. One would like to know the way in which such enterprises were financed.

At site **132** the present track swings sharply right and then doubles back down a deep cutting, to emerge on the lower slopes and run northwards along the main ridge between the Fosso della Fontanella and the Fosso Quadrata. There was never any paving beyond this point; but the density of Roman sites is convincing evidence that an unpaved track must have continued along roughly the same line as the present one. After 500 m. the road, now at a much lower level, skirts the left-hand side of the ridge in a well-marked escarpment. To the left two scatters of Roman building-material indicate two small sites (**133, 134**). Sites **135, 136, 137** and **138** are the main concentrations of what is almost continuous scatter of material along and to the left of the road, which here follows the crest or right-hand edge of the ridge. A large site (**139**) with a great deal of Roman material is set on a low, flat-topped eminence immediately east of the road, which cuts through a number of walls at right angles. Beyond this point the track is rather featureless,

[17] Ashby, 'The Via Flaminia,' *JRS*, xi, 1921, p. 153.

apart from one small building-scatter (**140**). At Casale Vallelunga there are two tufa blocks, one plain, the other a very rough cornice (**141**); they probably derive from a site overlaid by the older of the two farmhouses.

South-east of the Casale (where the Fosso di Vallelunga broadens) there occurs a rare exception to the general rule that settlement was confined to the ridges (**142**). A complicated group of remains stands on the edge of the valley-floor, beside a small tributary of the Fosso di Vallelunga. The overgrown rubble of a structure (a cistern?) and some *selce* blocks are all that survive. Beside them the small tributary stream runs for a short length (*c.* ■ m.) in a *cuniculus* that was perhaps designed to act as a bridge to the adjacent fertile slopes.

At 946734 the cross-country road from Capena crossed the main ridge and dropped steeply down to the Fosso della Mola d'Orciano on a north-easterly course. As on the Morolo ridge, the existence of a route to and from Capena has clearly influenced the pattern of settlement and a series of sites (**143, 144, 145, 146**) is clustered alongside it. Two of these (**145, 146**) lie beside the road ■ it climbs the eastern slopes of the ridge, the rest on the crest of the ridge.

Beyond this point the ridge swings more and more to the east to become the S. Martino ridge, where Capena's principal necropolis was located. Along this section few sites could be found (**147, 148, 149, 150**), though this may be due in part to the scrub woodland that extends from the northern slope of the ridge across the ridge-crest. Site **150** overlooks the prominent cutting that marks the line of the major route running northwards from Capena and the remains beyond this point are described elsewhere (p. 176).

129 926697. Small site perched on a ridge-crest immediately north of the road-cutting.
A small quantity of black-glazed ware; coarseware. Dolium. Reticulate *tufelli*; *selce* blocks; *op. sig.* (from cistern?).

130 929698. Important site immediately to the east of the road on the slopes of a lateral spur.
Terra sig.; Red Polished, thin-walled and coarse wares. B.T. Reticulate *tufelli*, *op. spic.*, *op. sig.*, tufa ashlar. Grey mosaic tesserae, veneer marble, painted wall-plaster.

131 934704. Recently-eroded site on the eastern spur of M. Grugnanello.
Terra sig. and coarseware.

132 936704. Large site above the road on the southern spur of M. Grugnanello, now heavily eroded.
Black-glazed ware; *terra sig.* and coarseware. Amph. B.T. *Selce* blocks; *op. sig.*; reticulate *tufelli*; travertine fragments; veneer marble; curved tile. Squared tufa block 50 × 55 cm.; tufa column (31 cm. dia., 6 cm. flutes).

133 938706. Small site to the west of the road-cutting. *Terra sig.* and coarseware.

134 939708. Site to the west of the road-cutting.
Black-glazed, Red Polished, thin-walled and coarse ■■■■ (incl. sherds of indented 'Campagnano' pattern). Amph. Dolium. Squared limestone blocks. B.T.

135 940709. Small nucleus beside the ridge track.
Coarseware. Amph. B.T. *Op. spic.*

136 941713. Nucleus to the west of the ridge-track.
Terra sig.; Red Polished and coarse wares. Amph. Dolium. B.T. *Op. spic.*; *op. sig.*, 1 marble frag. Grey mosaic tesserae. Glass and copper fragments.

137 942717. Site to the west of the ridge-track.
Black-glazed ware; *terra sig.*; Red Polished and coarse wares. B.T.

■■■ 942718. Site to the west of the ridge-road.
Coarseware; glass. B.T.

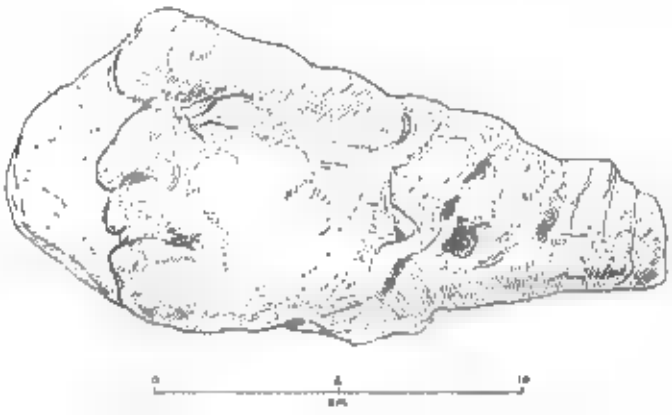


FIG. 16. VALLELUNGA: HEAD OF SATYR FROM SITE 139

139 944719. Very extensive nucleus immediately [redacted] the east of the ridge-track. Wall of travertine and tufa exposed in section.
Black-glazed ware; *terra sig.*; Red Polished ware, Amph. Dolium; storage-jar set in concrete. B.T. Blocks of tufa and travertine; *op. sig.*; *op. spic.*; veneer marble; mosaic tesserae. Carved marble face of a satyr in Luna marble (fig. 16).

140 944726. Small nucleus to the west of the ridge-track.
Red Polished and coarse [redacted] (incl. mortarium).

141 945729. Two large tufa blocks, one plain, the other a very roughly carved cornice. They probably derive from a nearby site, perhaps one overlaid by the older of the two farmhouses at Casale Vallelunga.

142 952727. A complicated group of remains on the floor of the Fosso di Vallelunga south-east of Casale Vallelunga, comprising:
(i) the rubble of a structure, probably a cistern, measuring approx. 3 m. square and made of medium-sized tufa and limestone blocks, with a little brick and tile;
(ii) a scatter of *selce* paving blocks, which are not sufficient to have formed a *diverticulum* leading to the site but which might well represent the remains of a paved courtyard, something to be desired in this rare example of a low-lying, muddy site;
(iii) a *cuniculus*, carrying the stream that runs beside the site. It is of the usual narrow-arched type, 2·08 m. high and 0·32 m. wide; two shafts survive.

143 947794. Small nucleus on the western side of the ridge, close to the point where it is traversed by the cross-country road from Capena.
Terra sig.; Red Polished and coarse wares.

144 947793. Medium-sized site under grass on a western spur of the Vallelunga ridge, beside the cross-country road from Capena.
Red Polished and coarse wares. Amph. Dolium. B.T. square tufa blocks.

145 951732. Medium-sized site on the lower western slopes of Vallelunga, beside the cross-country road from Capena.
Black-glazed ware; *terra sig.*; Red Polished and coarse wares. Tufa blocks.

[redacted] 951733. Nucleus, consisting largely of building material, beside the cross-country road from Capena; probably an outbuilding of its close neighbour (145).
Coarseware. B.T. Tufa blocks.

147 945736. The remains of a medium-sized building on a flat-topped ridge-crest overlooking the cross-country road from Capena.
Red Polished ware; coarseware. Amph. B.T.

952738. Scatter revealed in the present track-cutting on the S.E. ridge-slope. Probably from a small site higher up.
Terra sig.; coarseware. Tile.

149 954738. Site on the far Vallelunga ridge overlooking la Molaccia. The area is heavily overgrown and little pottery is available.
Red Polished and coarse wares.

956738. Nucleus under grass on the Vallelunga ridge-crest, overlooking the route from Capena to the north.
Terra sig.; coarseware. B.T.

The Monte Forco Ridge.—The M. Forco ridge diverges from the main Vallelunga ridge at 929700, beside site **130**, and runs over two and a half kilometre in a north-north-easterly direction. For over a kilometre erosion has given it a knife-edge profile with a crest as little as five metres wide at site **151**. Beyond site **152** the ridge broadens into M. Forco proper, and a series of Roman features was found along the next kilometre until the end of the spur.

Site **153** lay a little below the summit of M. Forco itself, while site **154** occupied the small saddle below it and yielded a bronze *quadrans* of Domitianic date. Ploughing has revealed the roughly-cut family tomb which belonged to it. Nearby stood another building on the slope of a small crest (**155**) and a small nucleus of brick and tile without any pottery, on the tip of the ridge (**156**), may well represent an outbuilding attached to it.

Despite its small area, two factors make this ridge archaeologically important. Unlike its western neighbour, the Montelarco ridge, it has not been occupied by any modern farms, and the whole section beyond M. Forco has only been brought under the plough for the first time in recent years. This means that here is a rare instance where one can be sure that all the traces of Roman settlement have been found. The six sites listed below with their associated features in fact represent the sum total of ancient settlement on the ridge and so allow some calculation to be made of the amount of land which could have belonged to each site. At the same time the greatly increased volume of small finds allows a more definite comment on economic conditions. At site **155** for instance, not a single piece of fine-quality pottery could be found among the mass of coarseware available. Similarly the loom-weight found there implies home-weaving, as specified by Cato's *de Agricultura* XIV (*telas togulas duas*).

With these advantages it became clear that M. Forco offered one of the few areas in the Ager Capenas where a small farm site might profitably be excavated. Accordingly site **154**, with its roughly-cut family tomb following the Etruscan tradition, was excavated in October 1961 with the kind permission of the Soprintendenza alle Antichitá dell'Etruria Meridionale. The results of this small excavation, combined with an analysis of the land-holdings on the ridge, will be included in the second part of this report.

151 931711. The nucleus of a small site on the very narrow (5 m.) ridge-crest.
Coarseware. Dolium. B.T.

152 932715. Scatter from a small site on the ridge-crest.
Coarseware. B.T.

153 934717. Scatter from a site occupying the crest of M. Forco.
Terra sig.; Red Polished ware; coarseware. B.T.; reticulate *tufelli*.

154 936718. Well-defined nucleus in the saddle between M. Forco and the ridge-crest occupied by the site **155**. A roughly-cut tomb apparently attached to the site lies 30 m. to the west.
Black-glazed ware; *terra sig.*; coarseware. Reticulate *tufelli*.
COIN: Bronze *quadrans*, dated to the reign of Domitian (post 84). *Obv.* Head of Minerva, r. with crested helmet. *Rev.* SC inside laurel wreath. Diam.: 1·1 cm. Poor condition.
The site was excavated in October 1961, and a description of the results will be included in the second part of this report.

155 936719. Very heavy scatter of material from a site occupying a ridge-crest on the N.E. spur of M. Forco. Among the large amount of pottery there is no good-quality ware.
Coarseware. Amph. Loom-weight. B.T.

156 937722. Small scatter of Roman brick and tile from the N.E. ridge of M. Forco overlooking the Fosso di Quadreta.
No pottery and only a limited quantity of brick and tile. Perhaps the equivalent of a *capanna*.

The Montelarco Ridge.—The Montelarco ridge leaves the Flaminia at the same point as the Vallelunga ridge and runs first north then north-north east for a little over three and a half kilometres. Clear traces of an ancient trackway occur along its course for the first two kilometres, and Roman sites continued to the end of the ridge. In its first section the narrowness of ridge would have discouraged settlement, and the first site (**157**) occurs after a kilometre, when the ridge crest broadens slightly. Beyond this point the ancient trackway runs in a very worn cutting (*c.* 4 m. deep) for over four hundred metres until site **158**, and again in a series of shallow cuttings past site [redacted] to sites **160** and **161**. Unfortunately all these nuclei lie under grass, but undoubtedly site **160** with its outbuildings (**161**) represents the major farm unit of the ridge, and there is [redacted] evidence for the continuation of the trackway beyond it. However, two further sites were found: one (**162**) was a small unit of early date set on a flat-topped hill, with at least two collapsed tombs nearby, the other (**163**) a building marked only by a scatter of brick and tile on the far tip of the ridge.

157 924704. An apparently large site astride the ridge but heavily covered with overgrowth.
No pottery available. Travertine and tufa blocks.

158 923711. Site under grass at the northern end of the road-cutting.
Little pottery available. Coarseware. Amph. B.T.

[redacted] 924714. Scatter of debris from a fairly extensive site which is heavily overgrown. Little material [redacted]
Coarseware. Amph. Glass. B.T.

[redacted] 927721. Large site on the ridge-crest. Unfortunately it lies under thick grass and no recognizable pottery [redacted] forthcoming.
B.T.

161 928721. Detached nucleus of Roman building materials on the lateral spur beside site **160**, of which it may well be an outbuilding.
B.T.

162 931725. Well-defined nucleus on the ridge north-east of Montelarco.
Black-glazed ware; coarseware. Loom-weight. B.T. Human bone?
At least two probable tombs (collapsed) *c.* 100 m. to the south.

163 935727. Thin but extensive scatter occupying the final spur of the ridge N.E. of Montelarco.
Coarseware. B.T.; *op. spic.*

The Morolo Ridge.—At 914718, on the eastern side of the Via Flaminia, stands the large medieval estate-centre of Casale Morolo, on the site of an earlier Roman

building.[78] From here a broad ridge swings in a gentle curve to the north-east as far as a point overlooking the Fossa della Mola d'Orciano. The only evidence for an ancient trackway now visible occurs at 919728, where a short (75 m.) length of cutting is preserved ■ it descends into the fertile saddle east of Casale Valle Croce. It is strange that no sites were found in the kilometre between Casale Morolo and the small site (**164**) on a flat-topped hill opposite Casale Valle Croce; here, however, intensive modern cultivation may have destroyed the evidence. In any case it is clear from the agglomeration of sites (**165–172**) along the eastern section of the ridge (known as I Montaroni) that settlement was concentrated in that half; this was clearly encouraged by the presence of the cross-country road from Capena, which climbed to the ridge-crest in a cutting between sites **171** and **172**. On I Montaroni the density of sites is surprising; almost every short lateral spur has its tell-tale scatter of Roman building material and it is regrettable that, as the area has not been ploughed, more cannot be said about the character of individual sites.

164 924729. Small site on the ridge overlooking Casale Valle Croce.
Coarseware. B.T.

165 927735. The ploughed-out building material of a large and important site on the main ridge at the south-western end of I Montaroni. Little pottery found.
Coarseware. Human bone and teeth.

166 927733. Small nucleus of brick and tile on the crest of a small ridge. Perhaps an outbuilding of the main site of 927735 (**165**). No pottery.

167 929734. Hilltop site, now overlaid by a barn on a southern spur of I Montaroni.
Black-glazed ware; *terra sig.*; ■ B.T.

168 933737. Substantial site ■ the main northern spur of I Montaroni.
Black-glazed ware; *terra sig.*; ■ Amph.

169 932736. Heavy ■ of tile, indicating perhaps an outbuilding of ■ main site at 933737 (**168**).
Coarseware. B.T.

170 932734. Medium-sized site under grass on a southern spur of the Montaroni ridge.
Black-glazed and Red Polished wares; coarseware.

171 937737. Small nucleus of material at the north-eastern tip of I Montaroni.
■ Polished ware; coarseware.

172 938738. Scatter from a fairly large site ■ the isolated spur at the tip of I Montaroni.
Terra sig.; coarseware. Amph. B.T.

The Monte Puledro Ridge.—The valleys of the Fosso Montano and the Fosso San Martino are separated by a ridge of varying width whose highest point is formed by M. Puledro (233 m.). It is most easily approached by a modern track which leaves the Via Flaminia at 920750. There is no surviving evidence for an ancient route along the ridge, though it would be reasonable to suppose that some form of communication did link the sites that lay along its crest. As on the Morolo ridge, there is a complete absence of sites for over ■ kilometre, though vineyards may have obscured the Roman material in this section. The main features of the ridge are two major sites (**173** and **174**) lying side by side on a small crest known as Cresceta. Both their size and their proximity are explained by the fact that at this point ■ extension of the cross-country road from Capena reaches the summit of the ridge.

[78] Ashby, *JRS*, xi, 1921, p. 155.

Beyond this group, settlement was on a smaller scale; after a small scatter, probably unrelated to any nucleus (**175**), a string of medium-small sites (**176–181**) continues along the ridge, which describes an S-bend over the next two kilometres. Site **179** yielded some examples of the thin-walled ware which belongs to the very early Julio–Claudian period,[79] and it is worth noting that small buildings like **179** and **181** contained tessellated pavements.

173 930747. Very large Roman site extending N. and S. of the present ridgeway track. Main nucleus beside modern *casale*.
Black-glazed ware; Red Polished ware; a wide variety of coarseware. Amph. B.T. Square travertine blocks; travertine half-column. Burials under tiles found below the site.

174 932748. Another very large site on the southern slope of the ridge beside the present track.
Black-glazed ware; Red Polished ware; coarseware. Roman coin, too corroded for identification. Amph. B.T. Fragments of marble veneer (Italian, Egyptian *granito della sedia*).

175 933749. Handful of coarseware sherds from a small scatter in a ridge-saddle.
Coarseware. Amph. B.T.

176 936747. Medium-sized site under grass on the southern side of the ridge.
Coarseware. Glass. Amph. Dolium. B.T. Reticulate *tufelli*; travertine and tufa blocks.

177 940750. Ploughed-out site on a small crest on the southern edge of the ridge.
Black-glazed ware; [redacted]. Dolium. B.T.

178 941752. Small nucleus immediately north of the present ridge-track, perhaps connected with the main site at 942753 (**179**).
Coarseware; B.T.

179 942753. Medium-sized Roman site on the northern tip of the ridge.
Terra sig.; Red Polished ware; 'thin-walled' ware with barbotine decoration; coarseware. Amph. Dolium. B.T.; black and white tesserae.

180 943752. Small nucleus N.E. of the ridgeway track.
Coarseware.

181 944750. Well-defined nucleus (including a building platform) beside the ridge-track along the Valle dell'Inferno.
Red Polished ware; coarseware. Amph. B.T. Coarse tesserae.

Distribution of Settlement.—It is axiomatic in ancient settlement of the kind with which we have been dealing that communications and settlement followed the ridges between streams and not the valley floors.[80] The country is still well-wooded, particularly on the valley sides, and, in antiquity, must have abounded in those *saltus impeditos* which Livy reckons among the worst obstacles.[81] There is not a great deal that can be said of the way in which settlement on the ridges developed. The distribution of black-glazed wares suggests, as one would expect, that the main Vallelunga ridge was the first to be settled. Settlement must, however, have advanced rapidly if a site like **154** on the far tip of M. Forco, the remotest of all the ridges, is known from coin evidence to have been a going-concern in the first century A.D. Taken with the decline of Capena itself under the Empire, the dense scatter of early and late Imperial sites on the Vallelunga, S. Martino and Morolo

[79] *PBSR*, xxvii, 1959, p. 150.
[80] The sole exception in the whole area is site **142**, but even there it is doubtful if there were any buildings other than a cistern in the nucleus. For the general point of ridge settlement, *c.* Ashby, *The Roman Campagna*, p. 226.
[81] IX, 36, 9, of the M. Cimini; the same factors appeared in Cisalpine Gaul, M. Cary, *Geographical Background*, p. 115.

ridges, provides a picture of agrarian decentralization at the expense of an urban centre.

In this process an important role was played by the cross-country road running north-west from Capena. It is unique in the whole Ager Capenas as the only route that does not follow the usual pattern of ridge communications, and its gradients combined with the mud of the valley floor must have rendered it impassable for heavy wagons during the winter months. There is no evidence for the date at which it came into being: it may first have answered the need to link existing sites and then gone on to promote settlement along its line. Five groups of buildings were clustered beside it on the Vallelunga ridge, settlement was concentrated close to it on the eastern part of the Morolo ridge and the major sites of the M. Puledro ridge (**173** and **174**) probably owed their growth to the extension of the route which reached the ridge crest beside them. Yet, if this road ultimately played an important part in the decentralization process outlined above, one must also remember that it continued to be focused on Capena and, ■ far as is known, had no link with the Flaminia. It has often been stressed that the Via Flaminia was a strategic trunk road, sited without regard for the local needs of the countryside through which it passed. It was designed to carry long-distance traffic without answering the needs of the older inhabited centres. What this meant in practical terms can be seen here *in parvo*. The roadside settlements that grew up alongside the Flaminia were new and, in a sense, artificial creations, destined to survive only ■ long as the settled conditions of which the road itself was ■ product. Despite the decline of the town itself, Capena continued to be the focal point of the region.

(*g*) *The Capena Ridges* (figs. 1,2, pp. 130, 131; pl. XXXIII)

The area included in this section comprises the difficult ridges that lie north and east of Capena, between the ancient roads running northwards to the Flaminia and eastwards to the Tiber Valley. These two routes formed the principal features controlling the pattern of ancient settlement. Both joined the Flaminia-Fiano ridge route, the former thus being the road that linked Capena to Falerii and the latter offering access to the Tiber valley near Fiano.

The northern road left the western approach to Capena (p. 132) at the western end of the Colle le Saliere and a shallow cutting, visible both on the ground and from the air, marks the descent to the Fosso di Vallelunga. There is no trace of a bridge, but the far bank was occupied by a substantial site (**182**). Close at hand in the broad valley floor lay two other buildings (**183, 184**), whose proximity suggests that they were in some way associated. The second site yielded a small quantity of Etruscan coarse pottery. The S. Martino ridge to the east formed the main cemetery of Capena and further sites are not likely. There is one, however, on a southern spur of the ridge, which yielded several architectural fragments in tufa (**185**). Taken with its unique position in ■ cemetery area, this makes it very tempting to identify the site ■ ■ temple or shrine. As the road climbs gently away from the Fosso di Vallelunga its winding course can easily be identified from the air, as shown in pl. XXXIII. It passes a pair of sites (**186, 187**) and ■ cistern on the ridge crest to the east (**188**), and so reaches the ridge-crest in ■ very prominent 300 m. cutting

(pl. XXXIV, *b*). About 70 m. to the east there is the nucleus of a site yielding only late Imperial pottery (**189**), and a group of sites to the west (**148, 149, 150**) has already been described (p. 170). On the northern side of the ridge the overgrown road-cutting begins the descent to the Fosso di S. Martino, which it crossed near La Molaccia. The later stages of the descent are completely lost in dense *macchia*.

182 959729. Remains of an apparently large site now washed away by stream action. Apart from a large quantity of tile, the only datable evidence was one sherd of *terra sig.*, and several reticulate *tufelli*. Towards the stream lies a fragmentary marble column-drum and several blocks of tufa ashlar.

960729. The first of two associated sites. Fragments of a wall are visible in the shape of a T (7·30 m. across the top). The wall is *c.* 80 cm. thick and built of *tufelli* and light grey mortar.
Dolium. B.T. A large basalt block (55×92×32 cm.).

184 961729. An associated site on a small adjoining spur.
Etruscan and Roman wares. B.T.; reticulate *tufelli*.

185 966727. Site on a projecting southern spur of the S. Martino cemetery ridge. Until 1960, when they were removed by *contadini*, several fragments of a cornice, column drums and bases in tufa were visible in the area. The unique position of this site within a cemetery area and the architectural fragments found there strongly suggest that it was a small temple or shrine.

186 957734. Small late Roman site.
Red Polished and coarse wares. B.T.; *tufelli*.

187 956733. Another small late Roman site.
Red Polished and coarse wares. Amph. B.T.; tufa ashlar.

188 961732. Substantial Roman site on the crest of the S. Martino ridge, west of the cemetery area. The principal remains are a rectangular cistern in limestone and mortar measuring 7·10×4·90 m., with walls 40 cm. thick. Its longer side lies roughly E.–W., and the wall reaches a height of 2·10 m. on the eastern side. West of the structure casual digging by *contadini* had uncovered an angle of the building with which the cistern was associated.
Red Polished and coarse wares. Amph. B.T.

189 954738. Late Roman site with much coarseware, on a shelf east of the road cutting.
Red Polished and coarse wares. Amph. B.T.; tufa ashlar.

Although the details of the river crossing at La Molaccia and the next half kilometre of the road are entirely lost, the general line from the Fosso di S. Martino along a ridge to M. Tartore is sufficiently clear. Traces of the road become visible immediately after a small scatter of pottery (**190**) at the head of a re-entrant running north from La Molaccia. On a spur to the west lie two other sites, one small (**191**) and the other large with partial remains of a building platform (**192**). There is no doubt about the course that the road followed to the north; it ran below site **193** along the eastern edge of the ridge, to meet the Fiano ridge road at M. Tartore, and its line is largely preserved by a track in today. A small site (**194**) lies on the slope beside it. It was here in 1959 that ploughing accidentally revealed the plaster-lined *dromos* of the painted tomb belonging to the site. The tomb itself was well preserved and the colours of the painted wall above the main funerary bed had survived considerable seepage. The painting portrays a stylized garden scene with a cupid and peacock on the right-hand side (pl. XL, *a*); the tomb probably belongs to the second century A.D. Some 300 m. to the north a site with material on either side of the track (**195**) marks the point where the road divided in two, forming a triangular junction with the Fiano ridge-road at M. Tartore. The

eastern fork can be seen at two points as a cutting running towards site **224**, while the western branch is roughly followed by the present track and joined the ridge-route at site **223**. In this way the road formed the fastest link between Capena and Falerii; the sites along the next section towards the Flaminia are described elsewhere (p. 183).

190 961751. Small scatter of coarseware close to Spot Height 216 m.
Coarseware; B.T.

191 958752. Small site, probably related to site **190**.
Coarseware; B.T.

192 958751. The remains of a large site on a building-platform (roughly 30 m. square), built on the ridge-slope overlooking La Molaccia. An eroded section of the building platform in tufa rubble and mortar is visible on the southern side (for such platforms, cf. sites **32** and **241**).
Terra sig.; Red Polished and coarse wares. Amph. Dolium. B.T. (incl. triangular brick). Fine black and white tesserae. Luna marble veneer fragments and reticulate *tufelli*.

193 961756. Small Roman building ploughed out immediately east of the ridge-crest. A large fragment of *op. spic.* flooring (*c.* 6×3·50 m.) marks the position of a cistern.
Coarseware. B.T.; and coarse marble fragments.

[redacted] 963757. Medium-sized site ploughed out immediately [redacted] of the road.
Black-glazed, Red Polished and coarsewares. Amph. Dolium. *Op. sig.* and reticulate *tufelli*.
The tomb beside the site was approached by a mortar-lined *dromos* (*c.* [redacted] m. long and 0·80 m. wide), which runs in a north-north-westerly direction. The tomb-entrance leads directly into a small antechamber with two side-recesses, of which that on the left contained a small niche in the end wall. Like the rest of the tomb the walls are lined with fine yellow plaster (*c.* 4 cm. deep) and the roof is decorated with floral motifs. From the antechamber a short passage leads into the roughly square (2·20 m.) tomb-chamber with the three funerary couches familiar from the Etruscan tradition. On either side of the entrance are two recesses, presumably for lamps. The wall to the left (south) depicts two peacocks symmetrically facing one another. On the opposite side a single peacock is shown resting on a branch with tail outspread. The main scene appears on the end wall and is reproduced in pl. XL, *a*. On the right-hand side a peacock and Cupid face each other across an elaborate wickerwork basket of flowers. Above this group and to the left run long, slender floral sprays; the painting is of a good standard in this section. Below the broad line on which the Cupid and peacock rest the floral motifs continue but are more crudely executed. The style suggests a date in the second or early third centuries A.D.

195 963758. The remains of a Roman building at the road-junction south of M. Tartore. An overgrown structure is visible, with an area of approx. 11×9 m. A small section of wall in limestone and mortar has a width of 65 cm. A few metres away on the western edge of the road the overgrown rubble pile of another building can be seen.
Black-glazed ware; *terra sig.*; Red Polished and coarse wares. Loom-weight. B.T.

M. Cuculo forms the main ridge north-east of Capena. The area was quite heavily settled in antiquity and, though no trace of any road survives, [redacted] kind of ridgeway probably linked the sites in much the same way as the present trackway. On the eastern side of the Fosso S. Martino the lower slopes of the ridge contained a small Etruscan and perhaps early Roman cemetery area. This is shown by several groups of Etruscan pottery found below Aprano, the final lip of the spur overlooking the river valley. Two of these (**196, 197**) are composed of sherds from simple *fossa* graves looted by *clandestini* in 1959. The other two (**198, 199**) yielded similar material from graves partially exposed by erosion. Above this small cemetery area and close to the present ridge-track stand the remains of a medium-sized Roman cistern and its associated site (**200**). To the north-west a few sherds show that the

opposite tip of Aprano was also occupied (**201**). There is then a half-kilometre gap before three sites occur in quick succession on the main ridge. The first (**202**) lies on a small projecting spur now marked by a hut. Three hundred metres north-east the remnants of another site (**203**) can be seen on an eroded ledge to the west of the main ridgeway. The track then enters thick woodland and passes the best-preserved site in the area (**204**) (fig. 18). It is the remains of a Roman building in *opus reticulatum*, partly refaced with modern cement. This is the last ancient site on the ridge and the modern trackway continues north to join the Flaminia–Fiano ridge-route half a kilometre west of S. Lucia.

196 973731. Material from the spoil of the clandestine 'excavation' of a *fossa* grave on the edge of the valley floor.
Etruscan impasto and coarseware; black-glazed ware; Archaic tile.

197 972731. Sherds from another robbed grave.
Etruscan coarseware; black-glazed ware.

198 973728. Extensive scatter of pottery washed out on the lower hillside, again probably from graves.
Much black-glazed ware and a little *terra sig.*

199 973727. Another robbed *fossa* (?) grave.
Etruscan impasto and coarsewares.

200 974726. Roman cistern and associated site overlooking the S. Martino valley. The cistern was originally set against the hillside for support. Approximately three metres of the internal wall have survived in position, while the entire outside wall (4·60 m. long) has slipped downhill. The original position could be calculated at one point as 2·90 m. from the other wall, thus giving the internal dimensions of the cistern as 4·60 × 2·90 m. The walls (0·60 m. thick) were built of limestone chips and light grey mortar, faced on the interior by a 2 cm. coating of good quality *opus signinum*. Both end walls have disappeared, but a fallen section of the vaulted roof lies between the two surviving walls.
Immediately below the cistern lies the site which it served. No datable pottery was found.
Coarseware. B.T.

201 972734. Very small site perched on the western tip of Aprano (183 m.).
Coarseware. B.T.

976733. Roman nucleus on a ridge-crest now occupied by a hut (Spot Height 201).
Terra sig.; Red Polished and coarse wares. Amph. Dolium, and a fragment of a quern.

203 981736. A poor site on a small ledge immediately west of the main ridge-track. A small section of a wall in coarse *tufelli* is visible.
Coarseware. B.T.

204 981737. In the thick scrub 200 m. above the last site lies the best-preserved Roman structure in the area, partly built in *opus reticulatum*, refaced with cement in modern times. The standing remains take the form of a single main room (6·70 × 6·35 m.) with a small extension on the N.W. side, as shown in fig. 17. The walls (40 cm. thick) are constructed throughout in limestone and light grey mortar, that on the N.W. side being in good quality *opus reticulatum* (9·5 to 10·5 cm. square). The use of reticulate *tufelli* without either brick or tufa quoins probably dates the building to the early Julio-Claudian period. On the S.E. and S.W. sides the walls are built in rough limestone courses. The reticulate N.W. wall has collapsed at the point where the entrance led into the small northern extension and so into the main room. The interior is heavily overgrown and the only feature readily visible is a thin (35 cm.) wall projecting into the main room from the N.W. wall. Neither this junction nor that in the S.W. corner is bonded. The structure represents a small farm building of the early first century A.D. and corresponds in general with the ground-plan of the peasant's farmhouses occasionally shown in Pompeian wall paintings, *e.g.* the tower-shaped rustic house depicted in the Casa della Fontana piccola (*v.* esp. M. Rostovtzeff, 'Die Hellenistisch-römische Architekturlandschaft,' *Röm. Mitt.* xxvi, 1911, p. 95, pl. XI, 1). The type normally at least two storeys high, the ground floor serving as a stable for animals and the upper storey living quarters (cf. the mosaics of Roman Africa; *e.g.* a pair of two-storey

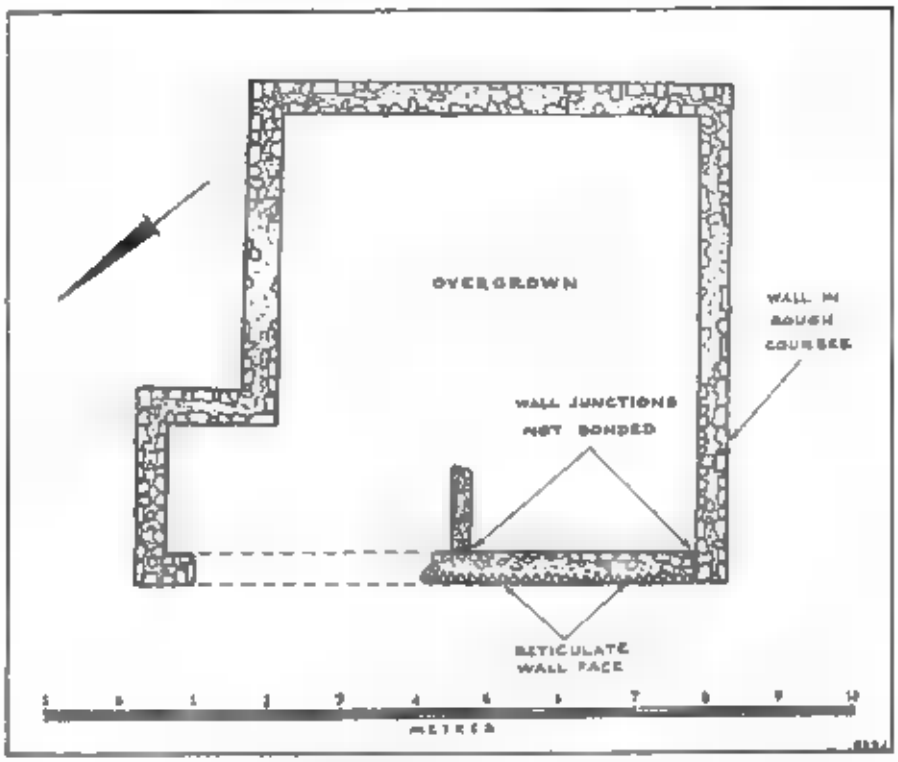


FIG. 17. MONTE CUCULO : PLAN ■ SITE 204

farmhouses in the Zliten villa, M. Rostovtzeff, *Soc. and Econ. Hist. of the Rom. Empire*, pl. XLIV, 2–3, S. Aurigemma, *I Mosaici di Zliten*, p. ■, fig. 54). The modern farms of the Ente Maremma and Cassa per il Mezzogiorno are still closely related to this tradition. The poorer kinds of Roman farm-buildings have been little studied, mainly through lack of evidence.

The road that ran eastwards from Capena has already been described within the area of the town. It probably left the eastern end of Capena by a gate in the lower rampart wall (fig. 7; p. 141) and ran down to the Fosso di S. Martino. Several of its limestone paving-stones (not *in situ*) are visible beside ■ medium-sized Roman site (**205**) on the edge of the valley-floor. The river must have changed its course many times in this area and all details of the crossing are lost. A small Roman cistern (**206**) lies in the valley-floor to the south. The road then climbed due east along the western ■■ of M. Pacciano. The lower hill-slopes have been heavily eroded. No indication of the road survives but erosion has exposed traces of a small cemetery ■■ either side of the route (**207**). Most of the burials belong to the Etruscan period and strongly suggest that the road is pre-Roman in origin (*cf.* pp. 181, 206). North-east of a small hut (Spot Height 147 m.) the road re-appears in ■ well-preserved cutting, 5 m. wide, and ■■ reached the lower ridge-crest south-west of M. Pacciano (pl. XXXI, *b*).

Here, close to site **209**, the road split in two, ■■ branch swinging south along the southern spur of M. Pacciano to Lucus Feroniae, the other following the main

ridge to the Flaminia–Fiano ridge-route. There is little to see of the Lucus Feroniae road until it descends the tip of ridge in a broad, curved terrace that leads to the crossing of the Fosso di Lago Puzzo beside site **208**. On the far side of the stream an Etruscan site (**289**) shows that the route was pre-Roman in origin; this and the interesting section that follows are described elsewhere (p. 206).

Meanwhile the eastern branch climbed past the substantial building-platform of site **209** and emerged from a shallow (*c.* 3 m.) cutting on to the flat crest of M. Pacciano, where the overgrown remains of a cistern mark an important site (**210**). This section of the road is still in use as a ridgeway today. Beyond the crest it enters another cutting, which has narrowed and deepened (4 m.) with continued use. The edge of the original cutting visible in the field south of the road shows the original width. It gradually becomes less and less distinct over the next 400 m. until all trace of antiquity in the present track is lost a few hundred metres short of the Fiano ridge-road which, at this point, is incorporated in the modern Fiano–S. Oreste road (p. 187). There can hardly be any doubt, however, that the two ancient routes met at Fiorano below site **237**. In this way the road we have been following connected Capena with the Tiber valley in the Fiano area where, as has been suggested (p. 127) there was probably an ancient river-crossing to the east of the town.

205 972719. Medium-sized Roman site on the edge of the valley-floor east of Capena. The overgrown walls of a cistern (4·70 × 4·50 m.) are concealed by a clump of bushes; the walls are built in limestone chips and light grey mortar. Around the site lies a scatter of limestone paving blocks, some with traces of wheel ruts.

Black-glazed, Red Polished and coarsewares. Amph. *Op. spic.* and reticulate *tufelli*; fine white tesserae.

[redacted] 974716. Isolated cistern [redacted] the floor of the Fosso S. Martino, approx. 40 m. from the present eastern bank of the stream. The remains are very overgrown, but the plan of the structure [redacted] rectangular (6·30 × 3·75 m.) and the walls (0·90 m. thick) were built of limestone chips and mortar.

207 975718. Thin but extensive scatter of Etruscan material from a cemetery area near a small hut on the slope S.W. of M. Pacciano.

A variety of impasto wares. Archaic tile.

208 983708. The [redacted] of a very eroded Roman site on the western bank of the Fosso di Lago Puzzo, where the Lucus Feroniae road crosses the stream.

Roman coarseware. B.T.

209 982719. Substantial site with much structural material but little pottery beside the road-cutting on the south-western side of M. Pacciano.

Black-glazed, Red Polished and coarse wares. Amph. B.T. Reticulate *tufelli*; tufa and travertine blocks, including a travertine doorsill with marks of wear from the door; it measures 1·15 × 0·57 m. and is 0·20 m. thick.

210 985724. Extensive scatter from a site occupying the elongated crest of M. Pacciano, where the walls of a cistern are just visible above the accumulated soil.

Terra sig. and coarsewares. Amph. B.T. Travertine blocks. Italian veneer marble.

(*h*) *The Flaminia-Fiano Road* (figs. 2 (p. 131), 18, 23, pl. XXXV)

Substantial traces survive of an apparently unpaved but important ridge-road running south-east from the Via Flaminia for over eleven kilometres in the direction of Fiano. Its western section formed part of the route linking Capena with the Flaminia but the road continued along the narrow, twisting ridge at least as far as the ridge overlooking Fiano. The Capena–Flaminia link may well be the more

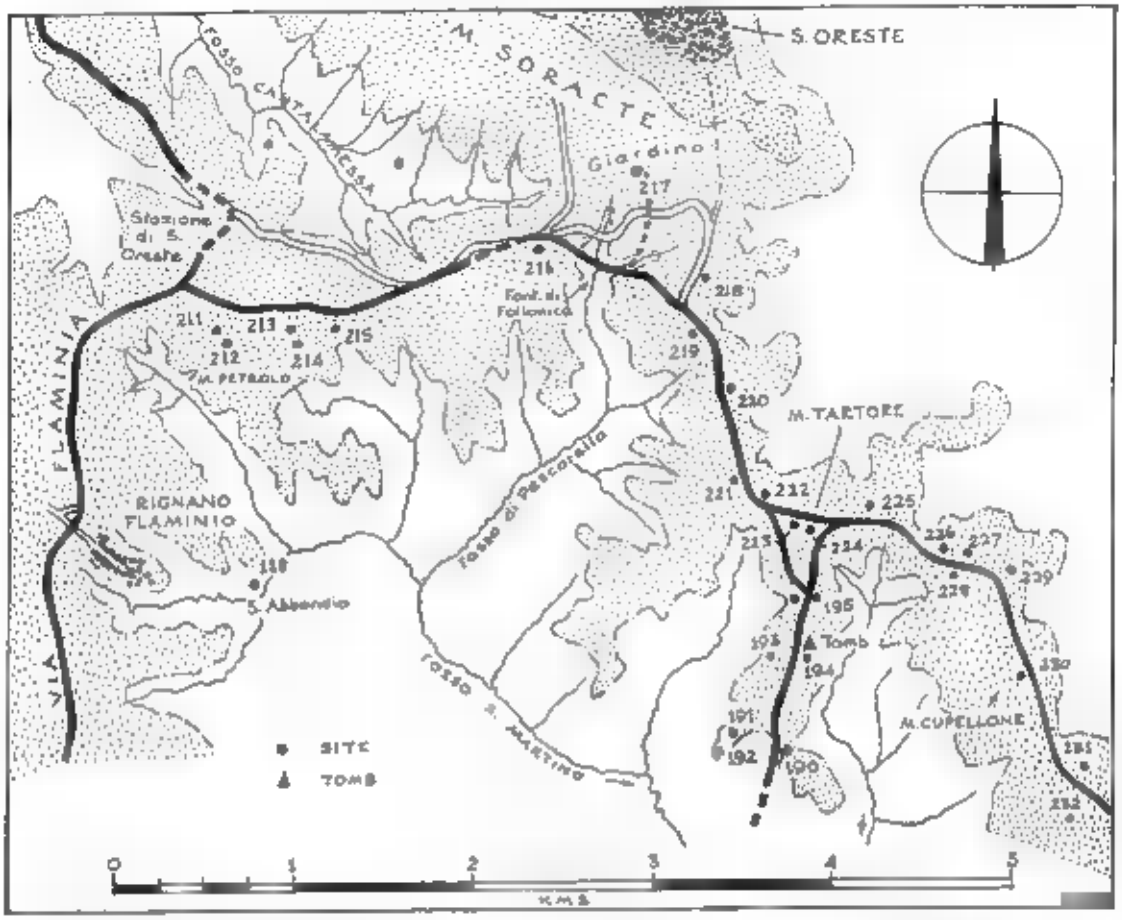


FIG. 18. THE FLAMINIA-FIANO ROAD: NORTHERN SECTION (*cf.* figs. 2 and 22) (*contours at 200 m.*)

important part of the complex; for the present purpose, however, the whole of the ridge-route and its settlement are treated as a unit.

The selection of this line for a road is easily explicable; its [redacted] from the Tiber plain to the Flaminia ridge is remarkable because it involves only one minor stream-crossing at Fontanile di Follonica (952777). The route was served by a number of roads and tracks radiating from Capena and was heavily populated in antiquity. Many sections survived to become part of the medieval trackway linking Fiano to S. Oreste, which diverges from the Roman line at 955755. The last decade has seen the [redacted] route followed by the modern motor-road from Fiano, which joins the Flaminia at Stazione di S. Oreste.

The road left the Flaminia at 927777 three hundred metres south of Stazione S. Oreste and the first section appears as a prominent cutting (3 m. deep on the south side) across M. Petrolo (930777), two hundred metres east of the Flaminia. The juxtaposed sites **211** and **212** share the spur to the south of the road, and another two **(213, 214)** lie on the eastern shoulder. The precise line of the road has been

ploughed away in this area, but it is roughly represented by a modern track, which drops down past another site (**215**) to the low ridge between the watershed between Fosso Pontano and Fosso S. Martino. This has been heavily cultivated, and the modern road to S. Oreste has destroyed the ancient line until the point where the latter diverges as an independent track running down to Fontanile di Follonica (952777). On the crest overlooking the descent and set back a little from the road stood a medium-sized site (**216**) with a very large (18·40 × 9·90 m.) cistern. Water conservation for the dry season always presented a problem on the limestone slopes beneath Soracte. This point is best illustrated by the size of the cistern of the very large villa at Giardino on the slope below S. Oreste (**217**). This villa is the largest building-complex in the area and occupies three artificial terraces cut in the hillside. An elaborate series of cisterns forms the principal feature of the site. The cisterns and the other remains are described below. They were probably approached by a *diverticulum*, roughly represented by a modern lane from Fontanile di Follonica.

East of Fontanile di Follonica and the Fosso di Pescarello, the climb from the valley-floor has been heavily eroded but, after a short break, the route can be traced as a sunken lane climbing south-east to the ridge-crest and then turning due south across M. Pepe. There are three Roman sites (**218, 219, 220**) along this section, and at one point (site **220**) the construction of the modern road has cut a neat section through a cruciform cistern. South-east of M. Pepe, between sites **221** and **222**, the road turned abruptly east and the route to Capena continued south down a long finger of land towards Fosso S. Martino.

211 928774. One of two juxtaposed sites on the S.W. slope of M. Petrolo.
Black-glazed ware; *terra sig.*; Red Polished and coarse wares. B.T. Red wall plaster; *op. sig.*

212 929774. The second of two juxtaposed sites on the S.W. slope of M. Petrolo.
Coarseware. B.T.

213 935774. One of two sites (50 m. apart) forming a group on the eastern shoulder of M. Petrolo.
Roman coarseware. Heavy scatter of brick and tile. Human bones from tile burials.

214 935773. The second of two sites forming a group on the eastern shoulder of M. Petrolo.
Terra sig.; coarseware. Crude *op. rt.* in rough limestone; coarse grey tesserae; window glass.

215 936775. Roman site with a small *cuniculus* beside the modern *fontanile* below the eastern slope of M. Petrolo.
Black-glazed ware; *terra sig.*; coarseware. Glass.

216 948778. Much-destroyed site of fairly extensive size, now partly covered by a new *casale* on the ridge west of Fontanile di Follonica. There is a large (18·40 × 9·90 m.) cistern in limestone and mortar.
Red Polished and coarse wares. Elongated grey tesserae. Also a few medieval sherds.

217 954783. The Giardino villa (fig. 19; pl. XXXIV, *a*). This site forms the best-preserved building-complex in the area. It lies in a commanding position astride the spur known as Giardino, overlooked by the town of S. Oreste perched on the S.E. end of M. Soracte. The surviving buildings lie on a series of three terraces stepped down the hillside. The upper terrace is 80 m. × 70 m. in area, the middle (on which most of the surviving remains occur) measures approximately ■ m. square, and is set in the eastern corner of the lower terrace (140 m. at its greatest extent). The complex has a uniform width of *c.* 70 m. throughout.
The line of demarcation between the middle and upper terrace was formed by an extremely long cistern (63·50 m. long by 4·90 m. wide) divided into ten intercommunicating compartments, each 5·10 m. in length, with arches 1·25 m. thick. The exterior walls ■ finished in coarse limestone, while the interior is coated in *opus signinum* throughout. The

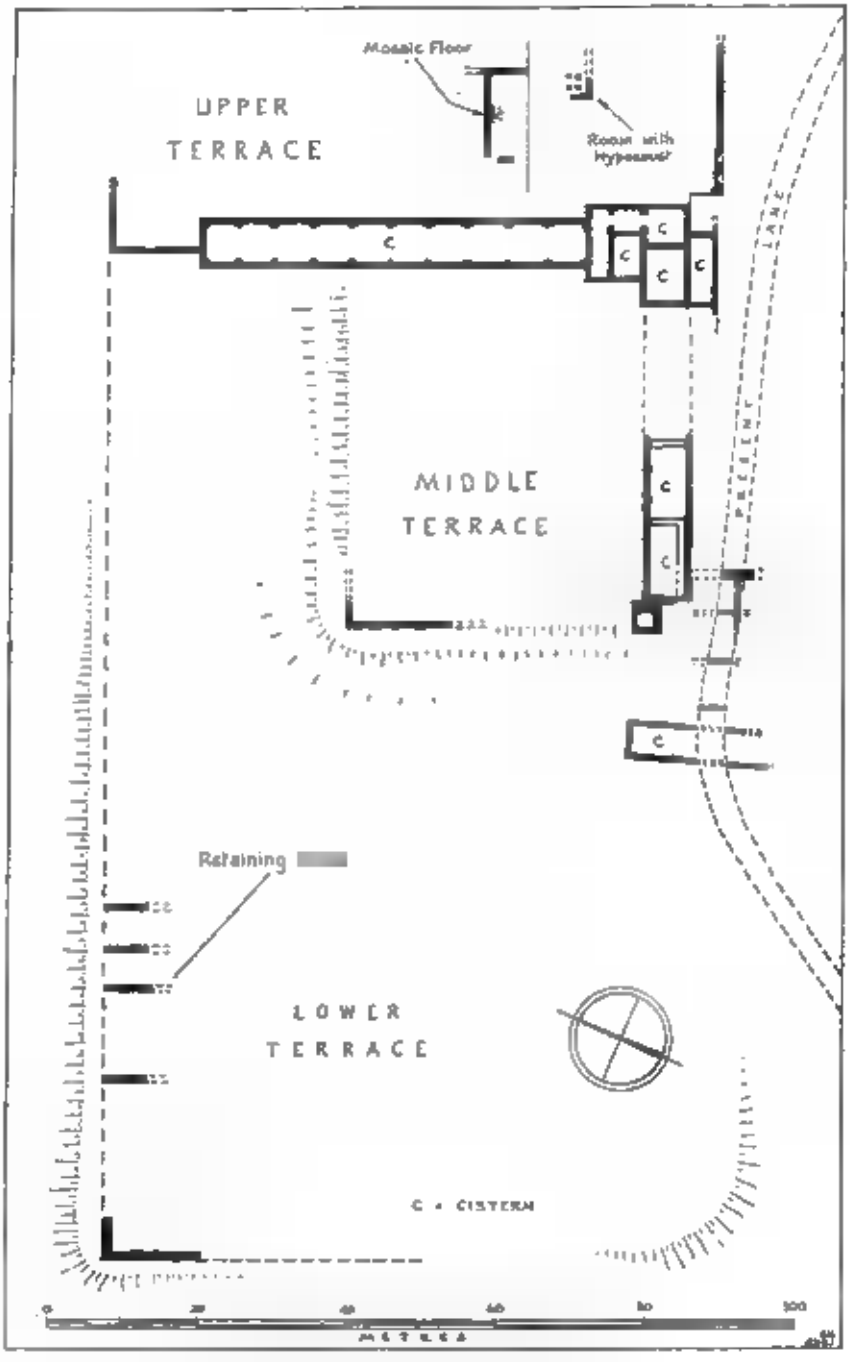


FIG. 19. THE GIARDINO VILLA (SITE 217)

brick arches separating the units of the cistern appear to be secondary to the main structure. Ashby included a plan of this feature in his original description of the site (*Memorie*, p. 166, fig. 16), but this oversimplified the arrangements beneath the medieval *casale* at the S.E. end. Here the series of cisterns continued for a further 15 m., and an example in a collapsed state is shown in pl. XXXIV, *a*.

Eighteen metres below this stand the remains of another cistern, which was probably joined to the main group in its original form. When originally built, the limestone structure was a single-chamber cistern (4·37 m. wide) reinforced by internal arches. Subsequently this was converted into two separate units by the construction of two cross-walls (0·85 m. thick), one of which was continued as a reinforcing wall along the south-eastern side of the cistern. In contrast to the original limestone and mortar structure, the additional walls are of brick, and their thickness (5 [illegible] = 24 cm.) suggests that they belong to the second century. The small extension at the western end of the building is blocked and cannot be examined, but it presumably played some part in the water-distribution system of the cisterns. In the S.E. wall of the building there are traces of wall-junctions, which show that the structural complex continued to the south, and the foundation courses of several room-walls can be traced in the floor of the modern lane that runs past the site. These fragmentary walls are shown on the general plan (fig. 19).

All the features so far described are of limestone construction. They belong to the original plan and are laid out along with the alignment of the villa terrac[illegible] within half a degree of accuracy. Below the last group of cisterns, however, casual digging has uncovered another cistern with a seven-degree variation from the basic alignment. As this difference indicates, it is secondary to the main layout and built entirely of brickwork, similar to that used in the modified cistern nearby, suggesting that this structure too is probably second-century in date. The remarkable point about the buildings described is that they are all cisterns. In number they are quite out of proportion to the size of the site. The neighbouring site **216** to the S.W. shares the same peculiarity. The explanation lies in the limestone character of M. Soracte. In a tufa countryside underground water reserves [illegible] be tapped by wells; this is not possible on the limestone slopes of Soracte, which receive hardly any rain from June until late September. Hence the elaborate water-conservation arrangements at the Giardino villa.

The other surviving features do not require much explanation. Only retaining walls and their supports survive on the middle and lower terraces. Chance digging on the upper level has, however, revealed two points of interest. Above the cistern a room with a black and white mosaic floor has been partially uncovered. [illegible] suggests that the upper [illegible] contained the [illegible] living quarters of the building, and this is confirmed by the discovery of a hypocaust floor in the garden to the south-east. The southern wall of the garden rests on the lower courses of a Roman wall, which contained at least two semi-circular [illegible]

Nothing is known of the site's history. The absence of black-glazed pottery and the use of *opus reticulatum* in limestone suggests that the original foundation of the villa belongs to the first century A.D. As already described, considerable modifications were made in the second century.

Terra sig.; Red Polished and coarse wares. Amph., *tubuli* and triangular bricks. B.T. Veneer-marble. Blue, green, black and white tesserae.

218 957777. Site with no datable pottery on the ridge east of Fontanile di Follonica.
Coarseware. Amph. Also several medieval sherds.

219 955775. Medium-sized site lost under grass in the hillside to the west of the road. Probable indications of an ancient building-terrace.
No datable pottery.

220 958770. The remains of a considerable site have been brought to light by the construction of the modern road, incl. a cruciform cistern 9·65 m. long by 0·97 m. wide.
Terra sig.; Red Polished and coarse wares. Amph. B.T. Wall revealed in section in the face of the road-cutting is 0·62 cm. wide by *c.* 2·05 high; the lower section in limestone blocks, the upper in finely cut *opus reticulatum* (6·9–7·0 cm. sq.).

221 958766. Medium-sized site beside the road on the southern shoulder of M. Pepe.
Terra sig.; Red Polished and coarse wares. B.T. Coarse elongated grey tesserae.

222 959764. Site beside the ancient road-junction on the west side of M. Tartore.
Terra sig.; thin-walled and Red Polished wares; coarseware. B.T.

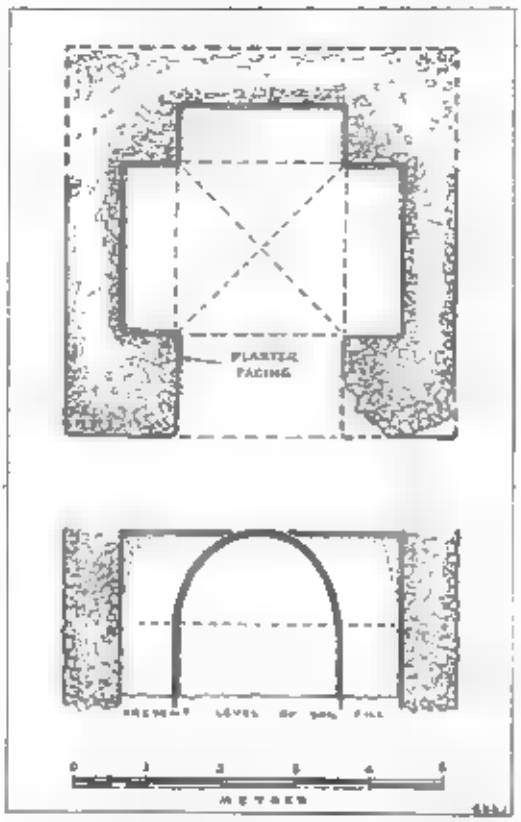


Fig. 20. Monte Cupellone: Tomb at Site 229

The road-junction at M. Tartore is triangular in shape, with the road from Capena forking into two arms beside the site at 962758. The details of the junction between the eastern arm and ridge road have all been destroyed by erosion and it is not possible to discover from their layout whether one route was earlier than the other. The whole area was thickly covered with ancient sites; several of these yielded Republican pottery, and it seems likely that ancient settlement spread on to the ridge from the Capena road at this point.

The ridge-road continued past a series of Roman farms and farmbuildings (**223–8**) to the tip of the northern spur of M. Cupellone. Here the modern road-cutting has bisected a large complex of buildings alongside a cruciform tomb-chamber, now serving as the foundations of a *contadino*'s hut (**229**) (fig. 20). The Roman and medieval route crossed M. Cupellone close to site **230** at a higher line than the present motor road, and then across a rocky saddle to the northern end of M. Cuculo, where it was joined by an ancient trackway climbing the ridge from Capena (982745), close to sites **231** and **232**.

The south-eastern alignment was continued in a 6 m. cutting south of S. Lucia, where an important route branched off to the north. The modern road bisects site

233 and rejoins the ancient line after a few hundred metres. They coincide along the ridge, past a series of Roman sites (**234, 235, 236**), until the small hill-crest known as Fiorano (993727); Fiorano and its northern spur overlooking the Fosso di Val Casale were occupied by sites **237** and **238**. Here the road was joined by an important route from Capena, which climbed the lateral spur of M. Pacciano in a series of prominent cuttings (p. 181). The Roman, medieval and modern roads all coincide closely over the next narrow section of the ridge (pl. XXXV). The last of these turns off at 995722, beside a medium-sized Roman site (**239**), but the medieval track incorporates the Roman line at least as far as 997719 (a little to the west of S. Stefano), where it turns down towards Fiano. An ancient track certainly continued a few hundred metres, to serve a small outbuilding (**240**) and the major 'villa' site (**241**) built on a platform outside the ridge at 998715 (fig. 21). This, however, was probably only a *diverticulum*; the main route almost certainly followed the medieval trackway down to Fiano Romano and the floor of the Tiber valley, there to join the lost section of the Via Tiberina north of Lucus Feroniae.

223 962764. Heavily eroded site at the ancient road-junction east of M. Tartore.
Terra sig.; Red Polished and coarse wares. Amph. B.T.

224 964762. Well-marked nucleus of pottery from a site in the triangular road-junction. The pottery includes much *terra sigillata*.
Terra sig.; coarseware. Amph.

225 967763. Important site to the east of M. Tartore. It was occupied over a long period. A few 'wasters' suggest that the site may have possessed a kiln.
Black-glazed ware; *terra sig.*; Red Polished and coarse wares. Glass. Wall-plaster. Also two medieval sherds.

226 970762. Small nucleus of mortar and rough limestone blocks north of, and immediately below, the road. Almost certainly an out-building of the main site at 971761, across the road.
Terra sig.; coarseware.

227 971762. Another small nucleus of building-material on the hill slope, again probably an outbuilding of 971761.
Coarseware.

228 971761. Fairly substantial site on a small eminence south of the road.
Terra sig.; Red Polished and coarse wares. Glassware frags. Iron door-bolt.

229 973761. Major site on the northern end of the M. Cupellone ridge, bisected by the new Fiano–S. Oreste road. Unfortunately little datable pottery was found.
Assorted coarsewares. Walls and footing in travertine; limestone and tufa blocks. Tile-lined floors. *Op. spic.*; pink wall-plaster. Cruciform tomb-chamber used as the foundations of a modern hut. Two dome-shaped, clinker-coated ovens.
The principal remains are the limestone and mortar structure that now serves as the lower chamber (and hen-coop) of a *contadino*'s hut (v. restored plan, fig. 20). The original facing has almost completely disappeared and the rear of the building is buried under nearly two metres of soil. The interior is filled with soil and debris within 1·18 m. of the ceiling. Structurally, it is a cross-vaulted chamber (span 2·30 m.) with three sides recessed to a depth of 82 cm. and the fourth (now filled by modern cement) left open to form an entrance. The walls were originally faced with a 3 cm. lining of fine plaster, little of which survives. The three recesses, following the Etruscan pattern, leave little doubt that the building was the tomb belonging to the site; a slightly more elaborate version has been found beside site **194**. There is no evidence of date.
The remains revealed along both sides of the road-cutting that bisects the site fit into no intelligible plan and are only recorded because of two ovens, away from the main group of buildings. They are nearly similar in size (4·70 m. and 4·40 m.), domeshaped (1·80 m. high) and heavily coated with clinker.

230 974755. Site lost under grass a little below the summit of M. Cupellone.
Brick and tile only.

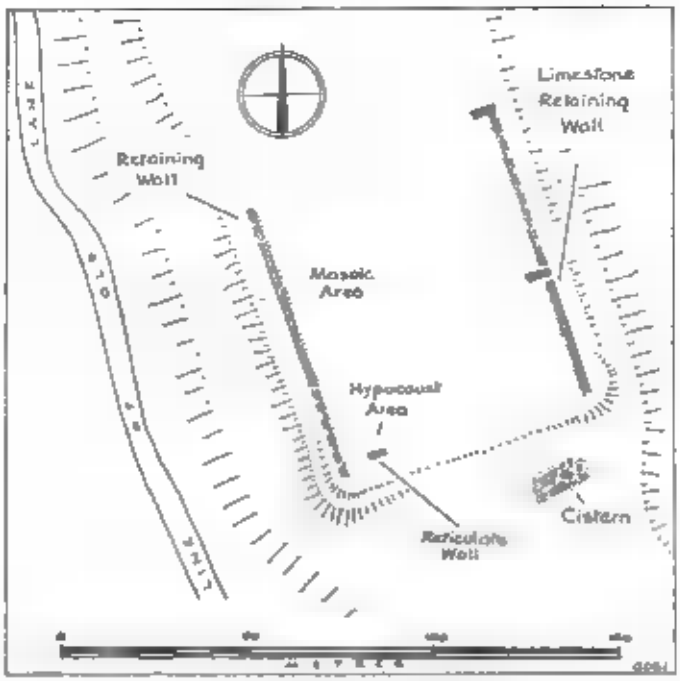


FIG. 21. FIANO: SITE 241

231 977746. Site occupying a flat-topped ridge to the south of the road.
Terra sig.; Red Polished and coarse [illegible] Amph.

232 977749. Small site, with much broken brick and tile, on a projecting spur on the northern end of M. Cuculo.
Terra sig.; [illegible] Amph. Lamp handle. B.T.

233 986746. A fairly extensive site, now split by the modern road, lies immediately east of S. Lucia by a probably ancient road-junction.
Terra sig.; Red Polished and coarse wares.

234 993732. Extensive pottery scatter on the site of a large building mainly to the east of the modern road.
Black-glazed ware; *terra sig.*; Red Polished ware.

235 994730. A [illegible] of building-material indicates the site of a medium-sized building on a projecting spur beyond Fontanile dei Monaci.
Terra sig.; Red Polished and coarse wares. B.T.

[illegible] 993731. A few coarseware sherds and a little building-material perhaps represent a small farm-building to the east of the road at Fontanile dei Monaci.

237 993726. Extensive scatter representing a site on Fiorano, opposite the point where a road from Capena joins the ridge. Also a possible tomb.
Terra sig.; Red Polished and coarse wares. Amph. B.T. Limestone blocks roughly cut into reticulate shape.

[illegible] 994725. Site on the spur beyond Fiorano.
Coarseware. Amph. B.T.

239 997722. A Roman building, destroyed by the modern road and later clearance, lies partly within the bend of the modern road as it leaves the medieval track and turns down to Fiano.
Terra sig.; Red Polished ware. Glass. Large square limestone blocks; large *selce* tesserae; marble frags.

240 998716. A few coarseware sherds, bricks and tiles point to what was probably an outbuilding of the major site at 998715, slightly to the north up the ridge.

Coarseware. B.T. Also a few medieval sherds.

■ 998715. Major site, occupying ■ ridge-top platform, which has been extended on the N.E. and S.W. sides. The building occupied a superb position, and the mosaics, painted wall-plaster, hypocaust and building-marbles clearly indicate the affluence of its owners.

Black-glazed ware; *terra sig.*; Red Polished and ■ wares. Hypocaust *tubuli*; painted wall-plaster; fine white mosaic pavement; square pavement pieces of Carrara and African marble.

This extensive site forms a typical instance of the way in which a large villa survives. As in so many cases, it is the building-platform that shows the size of the site, in this instance 71 ■ × 84 ■., with thick limestone retaining walls on the S.W. and N.E. slopes to increase the available building space (fig. 21). Typically too, no walls of the main set of buildings are visible to any great extent, but small finds indicate a few internal features. The most elaborate rooms lay along the S.W. side, where many finely decorated plaster and mosaic fragments were found. The S.W. corner was probably occupied by a bath-building; hypocaust *tubuli* and *pilae* tiles (21 × 19 × 4 cm.) were found there. Outside the main complex what was probably a set of farm-buildings lay a little way off to the north (site **240**), and fallen walls lined with *opus signinum* mark the site of a cistern just south of the villa patform.

The sites discovered along the western section of the road near Fiano Romano are much as one might expect. What is noteworthy and surprising about the ancient settlement is that the road west of M. Tartore, which in theory forms part of the pre-Roman route from Capena to Falerii Veteres (Civita Castellana), shows no traces of Etruscan occupation. This could, of course, be pure chance, but it could equally well reflect the extent to which difficult scrub woodland spread from the foot of M. Soracte; the small number of sites with black-glazed pottery shows that the process of settlement was here a slow one. In the Soracte area all these sites lie close to the Flaminia or M. Tartore (where the Capena road reaches the ridge), and these are presumably the two points from which settlement spread. The pattern of farms in the later Imperial period represents the complete utilization of the fertile sections of the ridge.

(*i*) *Lucus Feroniae and the Lucus Feroniae Plain* (fig. 22)

From the Scorano *bivio* at Km. 16·9 of the Via Tiberina to the modern village of Fiano Romano a stratum of travertine forms a well-defined shelf inclined gently towards the Tiber. The ancient site of Lucus Feroniae lay immediately north-east of Scorano at the southern tip of the area, which for convenience may be called the Lucus Feroniae plain. The whole topographical unit is formed in the shape of a southern-facing wedge, 5½ km. long and 3½ km. wide at its broadest point. Beyond Fiano a complex of ridges effectively limits access at the northern end. The Tiber flood-plain flanks the eastern side, while a series of hills running south-west from Fiano (M. Belvedere, M. Ruzzola, M. S. Lorenzo) divides the area from the Capena district to the north-west. These natural features separate the plain of Lucus Feroniae from the main body of the Ager Capenas. The pattern of ancient and modern communications has not been determined by the ridge-systems common elsewhere, and consequently it is more difficult to give a connected account of the remains.

Travelling across the plain along the papal road to Fiano one might think that the area is and always was fertile. This impression is misleading: in recent years

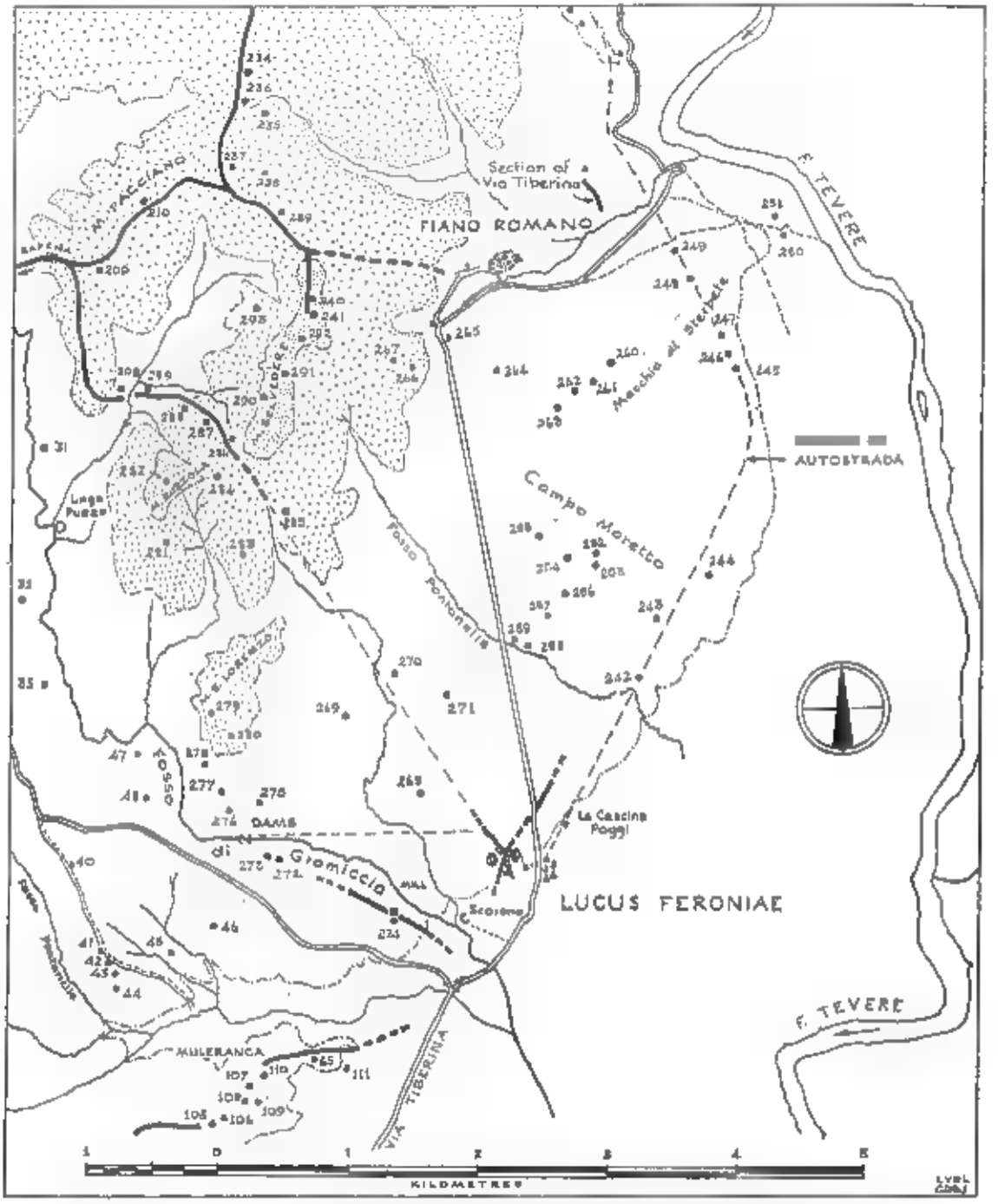


FIG. 22. THE LUCUS FERONIAE PLAIN: GENERAL PLAN (*cf.* figs. 2, 10) (*the dotted line immediately to the east of the course of the Autostrada marks the edge of the flood-plain: contours at* 125 *and* 175 *m.*)

deep ploughing has done much to create a good topsoil in the fields alongside the road. Away from it crops are meagre and the topsoil thin. In fact the paucity of topsoil (often as little as twenty or thirty centimetres deep) imposes a severe check on the fertility of the whole area.

An indirect result of this is that the Lucus Feroniae plain is the area in the Ager Capenas about which our knowedge of ancient settlement is least complete—perhaps no more than 60% of the total number of sites have been located. Roman buildings in the area were built largely of rough travertine blocks and as often as not these have been cleared from the fields, leaving a negligible scatter of tile and pottery, visible only if the ground is ploughed. In this way many sites must have been lost without trace under a few centimetres of soil. In this respect the discovery of Lucus Feroniae provided the greatest surprise of all. When, in 1953, the Superintendency cut a trench near the only upstanding ancient structure in the area, no-one suspected that the whole town would be found under a few centimetres of topsoil.

(i) *Lucus Feroniae* (pls. XXXVI, XXXVII, *a*, *b*)

The site of Lucus Feroniae (*Φερωνία πόλις*, Strabo V, 29; *fanum Feroniae* Livy I, 30, 5) is known to have lain within the Ager Capenas (Livy XXVI, 11). The problem of its whereabouts had exercised the ingenuity of scholars for many years,[83] but it was not until 1953 that the prolonged speculation about the site was brought to an end by the excavations undertaken by the Superintendency near Scorano, beside Km. 18·1 of the Via Tiberina. A few days' digging revealed an inscription referring to Lucus Feroniae,[84] and subsequent excavation brought to light the forum, flanked by rows of *tabernae* on the western side and an altar to Feronia at the northern end, the whole set at a tangent to the ancient via Tiberina. The identification of Lucus Feroniae incidentally settled another problem, the location of the river Capenas mentioned by Silius Italicus:

> *itur in agros*
> *dives ubi ante omnes colitur Feronia Luco*
> *et sacer umectat fluvialia rura Capenas* (XIII, 83, 6)

The close association with Lucus Feroniae means that the river in question can only be the modern Fosso di Gramiccia that flows to the south-west of the site and is the only important stream of the area. In its upper reaches, where it is known as the Fosso di San Martino, it flows past the eastern side of Capena, whence its classical name. Due west of Lucus Feroniae the stream was dammed to feed the Aqua Augusta, the aqueduct that supplied the town with water (p. 197).

The account that follows makes no attempt to offer a detailed description of the excavations. Some of the more important discoveries have already been described in print,[85] but the full details now await publication by Prof. Bartoccini. All that

[83] Nibby and Gell placed the site at S. Oreste, Lanciani at S. Antimo near Nazzano, while Nissen identified the shrine with the church of S. Abbondio near Rignano. Miss L. R. Taylor subsequently re-stated the claims of S. Antimo. See *JRS*, x, 1920, pp. 29–36.

[84] G. Foti, *Not. Scav.*, 1953, p. 13 ff.

[85] For a provisional description of the site, R. Bartoccini, *Atti del VII Congresso Internazionale di Archeologia Classica*, Roma, 1958; also, by the author, 'L'Anfiteatro di Lucus Feroniae e il suo fondatore,' *Rendiconti della Pontificia Accademia Romana di Archeologia*, xxxiii, p. 1 ff.

can here be discussed is the broad significance of the site, and its relation to the rest of the Ager Capenas, with particular reference to the literary evidence, to the main buildings identified by the excavations, to the nature of the Feronia cult and to the over-all history of the site, especially its foundation ■ a *colonia*.

Until 1953 the only inscription mentioning Lucus Feroniae was that recorded in an eleventh-century manuscript in the Sabine monastery of Farfa. It records the munificence of M. Silius Epaphroditus, who constructed an amphitheatre for the town at his own expense,[84] an event that received striking confirmation during the 1961 season of excavations by the discovery of the amphitheatre and the dedicatory inscription of its builder. The first literary mention of the shrine of Feronia occurs in a tradition preserved by Livy (I, 30) and Dionysius (III, 32), which relates that Roman and Sabine merchants quarrelled at a fair held in the sanctuary and so provided Tullus Hostilius with a pretext for declaring war against the Sabines; Dionysius adds an account of the festival, describing it as among the most famous of such gatherings in Italy. His account may be somewhat exaggerated, but in 211 B.C. the riches of the shrine were enough to tempt Hannibal to cross the Tiber from Eretum on the Via Salaria and plunder its wealth.[85] A later reference to the shrine in Strabo (V, 29), mentioning devotees of the goddess walking barefoot over hot coals, is probably a confusion between the worship of Feronia and the cult of Apollo Soranus on M. Soracte, where, ■ Pliny records, the 'Hirpi' were able to perform a similar feat.[87] Mentioned as a *colonia* by the *Liber Coloniarum*, its later history is lost in obscurity; but the centre did not altogether disappear. A member of the *vigiles* at Ostia in A.D. 168 and a veteran of the third century both record Lucus Feroniae as their native town.[88]

Feronia was a rural divinity worshipped principally by the Sabines, Latins, Umbrians, Etruscans, Picenes and Volscians, and to whose cult slaves and freedmen were specially devoted. The extent of her cult is shown by inscriptions from other parts of central Italy. Across the Tiber in Sabine country there is evidence of it at Trebula Mutuesca (*CIL*, IX, 4873–5) and Amiternum (IX, 4180, 4321), among the Vestini at Aveia (IX, 3602), in Umbria (XI, 6299), at Tuficum (XI, 5685), at Septempeda in Picenum (IX, 5711/2), with an important centre at Terracina among the Volsci. At the same time her cult existed at Aquileia (V, 776, 8218, 8307), and there are isolated examples from Histria and Noricum.

The character of the Feronia cult is best known at Terracina, where freedmen received the 'pilleus,' and where the inscription 'Bene meriti servi sedeant, surgant liberi' was inscribed on a seat of the temple there. It is in connection with liberti that the cult is first heard of at Rome in 217 B.C., when the freedwomen collected money for a gift to Feronia.[89] Feronia had a shrine in the Campus Martius, and the fact that the only dedication to her found in Rome was erected by a freedwoman strengthens the evidence for her relation to freedmen and slaves. This aspect of her cult clearly controlled Varro's explanation of her name: *Varro libertatem deam dicit Feroniam quasi Fidoniam* (Serv. Aen. VIII, 564).

■ *CIL*. XI, 3938.
[84] Livy, XXVI, 2.
■ Pliny, *N.H.*, VII, 19.
[88] *Not. Scav.*, 1911, p. ■. CIL VI, 2584.
[89] Livy, XXII, 1, 18.

Miss Taylor suggested that Feronia's cult at Rome and its association with freedmen owed its immediate origins to the shrine at Terracina rather than to Lucus Feroniae, the latter being merely the centre from which the cult had originally spread.[90] This hypothesis has now been ruled out by the discovery, close to the main altar at Lucus Feroniae, of three votive inscriptions in archaic lettering, one of which shows a *liberta* in association with Feronia;[91] from the associated coin and pottery evidence this can be dated to the early years of the third century B.C. Thus, while Feronia appeared first as a native goddess of central Italy, a role emphasized by the sacrifice of the first fruits of the season,[92] she was not long in acquiring her peculiar association with freedmen and the granting of freedom to slaves.

The recent Superintendency excavations have exposed most of the forum area of the town (pl. XXXVII, a). It was built on a roughly north-south axis with its western side flanked by a colonnade of Tuscan columns, behind which lay a series of *tabernae*. The northern end of the forum was occupied by a complex of sacred buildings that included the main altar of Feronia, the *aerarium*, a travertine podium pretentiously connected with a *basilica*, a small classical temple set on a reticulate podium and beside it an apsidal Augusteum. Along the eastern side of the forum ran a reticulate wall carrying part of the Aqua Augusta, which discharged into a *castellum* opposite the *tabernae* area. The forum was unpaved and contained several statue-bases. The area was demarcated to the north and west by the line of the Via Tiberina. This was joined at the northern end of the forum by the paved road that linked Lucus Feroniae with Capena. On the angle between the two roads lay the small amphitheatre excavated in 1960 (pl. XXXVII, b).[93] It is almost circular in shape (34·10 m. × 32·20 m.) and the use of *opus reticulatum* with tufa quoins should date the structure to the first half of the first century A.D., while brick stamps testify to repairs in the early second century. The excavations as a whole are impressive and interesting not only because Lucus Feroniae was a religious centre, but also because they reveal glimpses of life in a small town close to ancient Rome. The outstanding archaeological puzzle is that almost all the literary references to the site belong to the middle or early Republican period, whereas until the last season of excavation not a single excavated structure could be dated earlier than 50 B.C. with any confidence. In 1961, however, the foundation trenches of a large Republican temple were located in the area east of the aqueduct wall demarcating the eastern side of the forum. The next few years may reveal more buildings relating to the early history of the site.

The presence of the Augusteum and an aqueduct of the Augustan period at Lucus Feroniae raises an important point. This evidence of building-activity is a counter

[90] L. R. Taylor, *Local Cults in Etruria*, p. 54.

[91] esco salvod Arria/Platia T(iti) l(iberta) dedet ilbes/Fero(niae) don(o)m mereto. G. Foti and R. Bloch, *Revue de Philologie*, xxvii, 1953, p. 65 ff.; cf. G. Foti, *Not. Scav.*, 1953, p. 16.

[92] Livy, XXVI, 11: 'Capenates aliique qui accolae eius erant primitias frugum eo donaque alia pro copia portantes multo auro argentoque id exornatum habebant.' This is reminiscent of the [illegible]d of two inscriptions:—

SALUTI	and	FRUGIFERAE
S		S

cut on trapezoidal blocks [illegible] the [illegible]t and west of the main altar at the northern end of the forum.

[93] R. Bartoccini: 'L'Anfiteatro di Lucus Feroniae e il suo fondatore,' *Rendiconti della Pontificia Accademia Romana di Archeologia*, xxxiii, 1961, p. 1 ff.

to the view put forward by Tenney Frank that little or no public building went on in Etruria during this period.[94] The Etruscan towns were always pictured in decay by the time of the late Empire—*ceriminus exemplis oppida posse mori*.[95] This impression has perhaps been carried back too far for lack of counter-evidence. Veii, for instance, on examination, seems to show much the same growth of new public buildings as at Lucus Feroniae. In the former, new public baths were built, probably under Augustus and a group of Imperial building-dedications attests activity in the Julio-Claudian period.[96] The evidence is not obvious because, in cases like Veii or Capena, practically ▬ buildings have survived from this period and the evidence of public buildings from other towns in the area is tantalizingly small. Yet at Vicus Matrini, Vulci and Forum Novum the aqueducts can all be ascribed to the Julio–Claudian period, the first on epigraphic grounds and both the latter on structural evidence.[97] If more information were available it might be possible to bring the public building activity of the early Empire into proper perspective. There are, however, enough scraps to counter the picture of general decay that has sometimes been assumed.

One of the most interesting features of Lucus Feroniae is its name: *Colonia Iulia Felix Lucoferonensis*, as given in the Farfa manuscript and now confirmed by several inscriptions. A Sullan colony is improbable and it has been suggested, for a number of general reasons, that the foundation of the *colonia* belongs to the early years of the Augustan principate rather than to the Caesarian period.[98] The date can probably be determined with greater accuracy.

The crucial point lies in the adjectives *Iulia Felix*, which appear to have only one securely dated parallel, namely at the Caesarian colony of Sinope on the Black Sea.[99] Its foundation as ▪ colony dates from 47 B.C., when Caesar was faced with the problem of disbanding some of his veteran legions. Can there be any link between Sinope on the Black Sea and Lucus Feroniae in the Roman Campagna? The connection is one of date. In a letter dated July 46 B.C. Cicero states that the Ager Capenas was being surveyed for a land-settlement scheme: *Veientem quidem agrum et Capenatem metiuntur*.[100] The passage has been noticed before in relation to Capena; but it applied equally to Lucus Feroniae. It suggests that the establishment of Lucus Feroniae ▬ a *colonia* may date from 46, the year of Cicero's letter, in which case only a matter of months would have separated the two foundations of such a *colonia*.

If this is correct it explains much, but the choice of the adjective *felix* begs further explanation. Among the group of inscriptions recorded at the modern town of Capena may be recognized a *fasti ludorum*. This is clear from the repetition of the phrases *ludos dedet(unt)* or *fecer(unt)* and the frequent occurrence of dates.[101] The

[94] *Economic Survey of the Roman Empire*, V, ▮. 122.
[95] Rutilius Namatianus, *de reditu suo*, 1, 39.
[96] J. B. Ward-Perkins, *PBSR*, xxix, 1961, p. 57 ff. For the date of the Vaichetta Baths ▬ Veii, v. *PBSR* xxviii, 1960, p. 55 ff.
[97] For Vicus Matrini v. *CIL*, xi, 3322. At Vulci and Forum Novum both structures are of *opus reticulatum* with tufa quoins; there is no trace of brick and neither aqueduct is likely to be later than the Tiberian period.
[98] R. Bartoccini, *Atti del VII Congresso Internazionale di Archeologia Classica*, Roma, 1958, *loc. cit.*
[99] *CIL* III, 239. For the town, v. Strabo XII, 545, Pliny *N.H.* VI, 6.
[100] *Ad Fam.* IX, 17, 2; cf. E. Pais, *Mem. Acc. Linc.*, ser. 6, vol. i, 1925, p. 361. It is interesting that Dio (XLIII, 47, 4) notes confiscation of temple property by Caesar in 45 B.C. *Cf. Lib. Col.* I, 216, *in planitia ubi miles partionam habuit.*
[101] *CIL* XI, 3896–3909, 3910–13; *cf.* L. R. Taylor, *op. cit.*, p. 51.

years mentioned are A.D. 112, 133, 135, 182, the dates the 19th, 20th, 21st, 24th, 25th, and 26th of July.[102] According to the Roman calendar the games scheduled for the days in question were the *Ludi Victoriae Caesaris*. They were founded by Caesar when the temple of Venus Genetrix was dedicated on September 26th, 46 B.C. Due to the reform of the calendar, however, the games were subsequently celebrated at the end of July—the 20th to the 30th is the period specified by several Augustan calendars. They are known to have been held in 44 B.C. and in A.D. 15, under the praetors to whom control of all regular games had passed in 22 B.C. The fact that control of the games lay in the hands of the praetors, not the consuls, shows that they held an assured position in the sacred calendar and their celebration outside Rome would not have been abnormal.[103] In fact the scope of the games may have been larger than appears at first sight. An inscription from the Umbrian town of Ameria records a *flamen Victoriae et Felic(itatis) C(aesaris)*.[104] There does not seem to be any other trace of the cult of Victoria et Felicitas Caesaris; it must, however, have been closely related to Venus Genetrix, the ancestral divinity of the *gens Iulia* to whom Caesar dedicated a temple in 46 as the consummation of a vow made to Venus Victrix. In fact, the actual name of the games, *Ludi Victoriae Caesaris* shows the identification of Venus Victrix with Venus Genetrix.[105] The conjunction of Felicitas with Victoria is easily explained; Felicitas, identical with the Sullan Venus Felix, was worshipped together with Venus Victrix in the sanctuary by the Theatrum Pompeii. The cult of *Victoria et Felicitas Caesaris* must have been, if not absolutely identical, at least very closely associated with the cult of Venus Genetrix and so with the *Ludi Victoriae Caesaris* of 46 B.C. The use of the adjective *felix* in the title of Lucus Feroniae, therefore, fits in with the historical context of this period and coincides with the other foundation of a *colonia Iulia Felix* at Sinope and Cicero's contemporary reference to land distribution in the Ager Capenas. To emphasize the historical context still further there is a coin-issue of 47 that shows the connection between *Felicitas* and *Victoria* and so the *Ludi Victoriae Caesaris*. The obverse of the *quinarius* series portrays the head of Felicitas (above the word FELICITATIS), with Victory in a *biga* on the reverse.[106] All the evidence—the coin-issue, the *colonia Iulia Felix* at Sinope, Cicero's reference and the *fasti ludorum* showing the celebration of the *Ludi Victoriae Caesaris*—points to the years 47/6 B.C. as the period of the foundation of Lucus Feroniae as a *colonia*. The Augusteum and the Aqua Augusta, however, show that the associated building programme was probably delayed until the Augustan period, when further veterans were added to the *colonia* (Frontinus, *de controv. agr.* A.164).

The immediate environs of the town.—A survey of the area round the town immediately brought to light an important and surprising point, the almost complete lack

[102] The restorations seem to be certain: '[XIIII. XII]I. XII. Kal.' (3901) and '[V]IIII. VIII. VII. K[al.]' 3906).

[103] The *Ludi Victoriae Caesaris Augusti* at Iguvium (Gubbio) (*CIL* XI, 5820) and the *Ludi Victoriae* of Spoletium (XI, 4814) were probably closely related to the original games.

[104] CIL XI, 4371 (= *ILS* 6631); also in the same town a *curator lusus iuvenum V(ictoriae) F(elicitatis) C(aesaris)*, XI, 4395. Cf. also 4367.

[105] The distinction was never clear. Pliny (*N.H.* 11, 93) and Seneca (Nat. Quaest. VII, 17, 2) refer to the games as *Ludi Veneris Genitricis*.

[106] H. A. Grueber, *Coins of the Roman Republic*, I, p. 518, pl. L. 20.

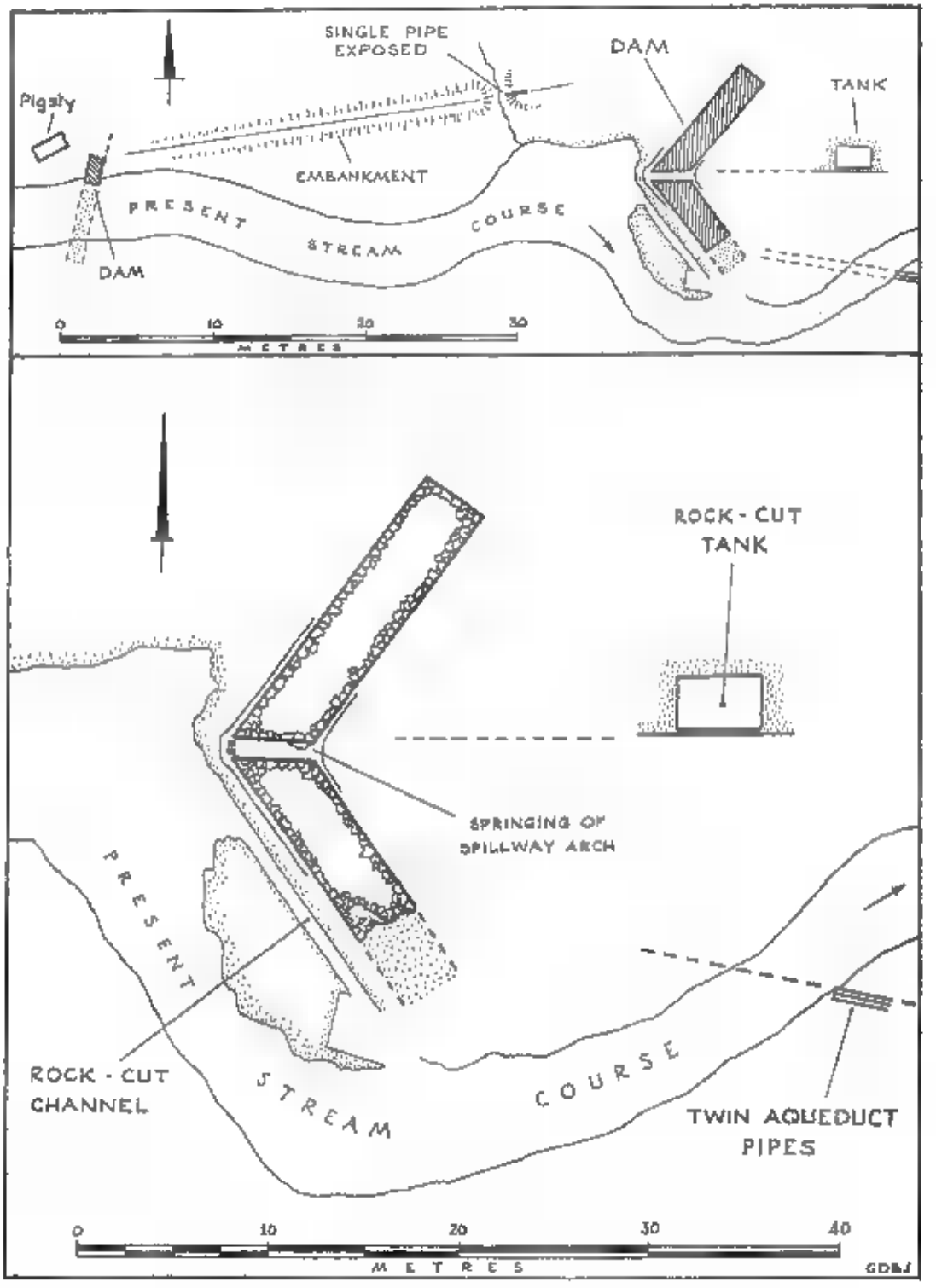


FIG. 23. THE *Aqua Augusta*: PLAN AND DAMS (*cf.* pls. XXXVIII, *b*; XXXIX, *a*)

of neighbouring sites to the west of the town. Apart from a few insignificant scatters of pottery, there is only one definite occupation-site nearly a kilometre to the north-west, yielding mainly late Roman pottery. This can hardly be explained solely in terms of a thin topsoil from which all pottery has vanished. The area towards the west beyond the amphitheatre was perhaps partly occupied by a sacred precinct; at all the other cult-centres of Feronia, with the possible exception of Trebula Mutuesca, the goddess's shrine lay outside the city limits, apparently in a sacred grove; *e.g.* at Terracina the shrine lay '*in tertio miliario a Terracina.*'[107]

On the eastern side of the town the picture is very different. Most of the area is covered by a heavy scatter of pottery. On the tip of the travertine scarp overlooking the Tiber flood-plain (beside Km. 18) numerous black and white mosaic tesserae suggest that the area contained residential buildings of good quality. A little to the north additional evidence came to light with the construction of the Autostrada del Sole. When examined in April 1961 the section of the cutting 300 m. south of La Cascina Poggi revealed traces of six Roman tile-burials in a reasonable state of preservation. The workman in the area said that many more had been destroyed completely in excavating the cutting, so this must have formed part of the cemetery-area of the town. All six graves belong to the same crude variety. They are shaped in the form of an inverted V made out of two 50 cm. *tegulae* or roofing tiles, with the apex covered by a curved tile or the flange of another *tegula*. The width of the graves varies between approx. 40 and 60 cm. The type is perhaps best seen in the poorer sections of the Isola Sacra cemetery at Ostia.

Other Roman material found in the cutting includes a large (1·10 m. wide) travertine doorsill and a fragment of a capital of the Tuscan order (49 cm. high and 40 cm. in diameter).

(ii) *The Aqua Augusta* (figs. 23, 24; pls. XXXVIII, *b*, XXXIX)

At an early stage the excavations at Lucus Feroniae brought to light an inscription mentioning extensive repairs to the town's aqueduct, the Aqua Augusta. Inside the excavated area a storage tank (*castellum*) of the aqueduct was located on the eastern side of the forum. Later Prof. Bartoccini was able to trace much of the internal distribution-system in the lower section of the town, before the area was disturbed by the construction of the Autostrada del Sole.

When the size of the aqueduct became apparent, the likelihood of finding its source was greatly increased, since there is only one stream in the area, the Fosso Gramiccia (Fosso di San Martino), which normally has a constant flow of water all the year round. It rises on the eastern side of the Flaminia ridge, flows past the site of Capena and runs a little to the south of Lucus Feroniae, beside the Casale di Scorano, before joining the Tiber west of Km. 28 of the Via Salaria. In its deeply entrenched course above the Casale the stream flows over the edge of several travertine strata in a series of waterfalls. Advantage was taken of this to make the water-power available serve two medieval mills. This level, however, is too low to have supplied the upper part of Lucus Feroniae with water, and the most suitable point for a dam lies close to a small waterfall nearly a kilometre upstream, where the river flows in a gentle curve round the southern shoulder of Monte San Lorenzo.

[107] *cf.* Hor. *Sat.* 1, 5, 24.

Seventy metres above the waterfall can in fact be seen the very eroded remains of a dam in the shape of an open V set against the stream (fig. 23, pl. XXXIX, *a*).

Most of the dam has been washed away by the action of the river, which has broken through on the southern side and now flows in a flat arc round the remains. Originally the dam must have blocked the stream completely; its northern and southern arms are set against the stream at an angle of 39° and 146° respectively. The two arms were both 3·20 m. thick, and the lower courses of that on the northern side are preserved for almost its entire length, to a length of 16·90 m. on the upstream face and 14·80 m. on the downstream face. Only 12·80 m. remain of the upstream face of the southern arm. Both arms rested directly on a stratum of travertine; they were separated by a narrow (90 cm.) spillway with two blocks set in the floor at its entrance. The springing of a small arch spanning the spillway can be seen in the northern wall. The whole structure is built of coarse limestone and travertine blocks set in waterproof cement. The impression of a tubular object (*c.* 60 cm. thick and 3·50 m. long) partly preserved in the northern arm suggests that a tree trunk was incorporated in the structure for additional rigidity during construction.

Two minor features also require mention. Parallel to, and 1·20 m. from the upstream face of, the southern arm, a rock-cut channel runs south-east for 12 m. towards what appears to be a tank. The change in the course of the river bed has destroyed any further evidence. The channel is 60 cm. wide and cut *c.* 70 cm. into the bed travertine. The second feature lies 19 m. below the dam. It takes the form of a rectangular (4·40 × 2·90 m.) rock-cut tank, the southern edge of which lies on the same alignment as the spillway. The purpose of both this and the rock-cut channel still need explanation.

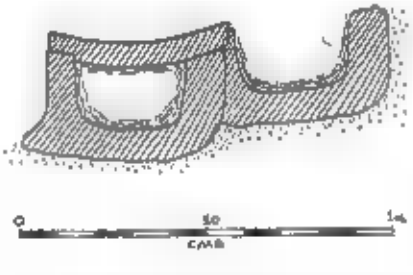


FIG. 24. THE *Aqua Augusta*: SECTION OF TWIN AQUEDUCT CHANNEL (*cf.* pl. XXXIX, *c*)

The present stream-bed curves in a half-circle past the southern side of the dam and there resumes its eastward course. Twenty-three metres from the southern tip of the dam the twin channels of the aqueduct it served can be seen in section in the south bank of the stream. The two U-shaped pipes are set in a trench (85 cm. wide) cut in the natural travertine (fig. 24, pl. XXXIX, *c*). Both channels are made of waterproof cement (on the average 12 cm. thick) and sealed by a mortar cover. The two pipes in question are not identical, because the northern *specus*, the first to be laid, was allowed to occupy slightly over half the aqueduct trench. In consequence

the second *specus* lies at a slightly higher level than the other. The internal sections, however, were the same, originally measuring 28×15 cm. Subsequent accretions to the interior of the pipes had reduced them to approx. 24×11 cm. in both cases. The aqueduct is visible for ■ total length of 1·55 m. Its alignment runs at an angle of 106°, which means that it must originally have met the dam at the point where the surviving masonry ends on the southern side of the structure. There is no indication of the point where it recrossed the stream.

So far one dam and a twin aqueduct pipe. There are, however, traces of another dam in the southern bank 70 m. upstream, below ■ modern pigsty. A massive wall in limestone rubble and mortar can be seen at water-level; it lies at angle of 11° and is at least 2·50 m. thick. Though little is visible above water-level, the top of the structure was found by digging in the area beside the pigsty, giving the dam an original height of at least two metres. Beyond the opposite river-bank more of the wall is said to have been destroyed by ploughing several years ago.

From the top of dam on the northern bank an embankment runs eastwards at an angle of 85° for *c.* 60 m. In a section free from overgrowth it was found to measure 5·00 m. at its base tapering to 1·80 m. at the crest. Fifty-two metres from the dam the embankment has been bisected by erosion from ■ small wet-weather stream. This has revealed a 1·50 m. section of a broken oval pipe measuring 17·5×13·5 cm. and set in the top of the embankment. The pipe itself is made of fine quality *opus signinum* set in a bed of light grey mortar, resting in this instance on the coarse travertine rubble that forms the basis of the embankment (pl. XXXIX, *b*). No trace of this pipe continues in the area beside the first dam but it ■■ found that, if projected, the alignment of 85° would cut the wall of ■■ underground storage room below a small farm ■■ m. away (at 997675). The storeroom is cut in fairly soft rock and the aqueduct pipe (*specus*) appears in section with exactly the same measurements ■ before.

There ■■ thus within this small area the remains of one dam with a single *specus* and of a second feeding a pair of aqueduct pipes. Both are aligned on Lucus Feroniae, one to the north, the other to the south of the amphitheatre and their Roman origin is not in doubt. The explanation of this apparently anomalous situation probably lies in the inscription, found at an early stage of the Lucus Feroniae excavations and now visible in the small museum attached to the site. It refers to extensive repairs to the Aqua Augusta.[108] The words '*ampliandam novis capitibus et rivis*' implies the construction of new aqueduct channels and may reasonably be taken to refer to the addition of a new aqueduct. Applied to an aqueduct *capitibus* can hardly mean anything other than the source, *i.e.* the dam.

Which of the two dams discovered belongs to the new aqueduct channel and which to the original Aqua Augusta cannot be decided with certainty. Assuming that the extension of the aqueduct was prompted by the inability of the existing system to meet increasing demand, the single channel aqueduct is perhaps more likely to represent the original Aqua Augusta.

■■ L. Suedius Bassus/C. Mamrius Capito/II uir(i)/aquam augustam/restituendam et ampliandam/novis capitibus et rivis ex/D. D. C.

Both the aqueducts discovered belong to the closed-flow variety, which enables their rate of delivery to be calculated with an accuracy of ±10%.[109] The details of the single channel example are worked out below.[110] The formula for water-flow in a closed pipe is:

$$V = c\sqrt{\frac{h\,D}{L+54\,D}}$$

where V = approx. mean volume in ft./sec.

C = coefficient (calculated from the area of the cross-section of the pipe: in this instance 39)

D = diameter (*c.* 6 ins.)

h = total head (vertical drop) in feet = 28·9 ft. calculated from a constant incline of 0·4°.

L = length (*c.* 5775 ft.)

$$V = 39\sqrt{\frac{28{\cdot}9\times6}{5775+(54\times6)}}$$

$$= 39\sqrt{\frac{28{\cdot}9\times6}{6099}}$$

$$= 39\sqrt{\frac{57{\cdot}8}{2039}}$$

$$= 39\ \sqrt{0{\cdot}0284}$$

$$= 39\times0{\cdot}0533$$

$$V = 2{\cdot}0797 \text{ ft. per sec.}$$

To find the discharge in cu. ft./sec. this result is multiplied by the area of the cross-section of the pipe in square feet, which, in this instance, is 28·26 sq. ft.

$$\text{Volume in cu. ft./sec.} = 2{\cdot}079 \times \frac{28{\cdot}26}{144}$$

$$= 2{\cdot}079 \times 0{\cdot}196$$

$$= 2{\cdot}08 \times 0{\cdot}2$$

$$= 0{\cdot}416 \text{ cu. ft./sec.}$$

Given that 1 cu. ft./sec. produces 6·25 Imp g.p.m., the rate of discharge will be:—

—for 1 min. = 0·416 × 6·25 × 60 Imp gals.
= 156 Imp gals. (= *c.* 718 litres)
—for 1 hr. = 9360 Imp gals. (= *c.* 43,080 litres)
—for 1 day = 224,640 Imp gals. (= *c.* 1,033,920 litres)

By a similar method of calculation one can estimate the discharge of a single pipe of the twin-channel aqueduct:—

$$V = 42\sqrt{\frac{28{\cdot}9\times7{\cdot}2}{5775+(54\times7{\cdot}2)}}$$

$$= 2{\cdot}478 \text{ ft./sec.}$$

$$= 0{\cdot}49 \text{ cu. ft./sec.}$$

This gives the rate of delivery as

for 1 min. = 173·75 Imp gals. (*c.* 799 litres)
for 1 hr. = 10,425 Imp gals. (*c.* 47,940 litres)
for 1 day = 250,200 Imp gals. (*c.* 1,150,560 litres)

[109] Open-channel flow is less precise. For an attempt to estimate the volume of the open-flow aqueduct serving the Roman gold-mine at Dolaucothi in Wales, see *The Bulletin of the Board of Celtic Studies*, xix, 1, p. 71 ff.

[110] For convenience the calculations are made in feet and inches.

This figure represents the discharge of one pipe only, so that the total daily volume of water would be *c.* 500,400 Imp. gals. Thanks to the greater precision of closed-flow hydrology, these results should be accurate to within ±10%. By adding the daily delivery of both aqueducts (725,040 Imp gals. = *c.* 3.335.040 litres) one can estimate that the volume delivered to Lucus Feroniae was close to three-quarters of a million gallons *per diem*. This interesting result gives an idea of the amount of water needed in towns of modest size in central Italy. Vulci and Forum Novum in the Sabine territory were served by aqueducts of roughly similar size. For comparison the combined volume of the Lucus Feroniae aqueducts is much less than that of the Aqua Alsietina, the smallest of Rome's aqueducts (built by Augustus, probably to supply the Naumachia he built in 2 B.C.; Frontinus, *de aquas ductu* par. 11, *CIL* vi. 31566 = xi. 3772 A). It has been estimated to have carried 3,470,160 gals. per day (T. Ashby, *The Aqueducts of Ancient Rome*, p. 30, based on the calculation of the *quinaria* at 0·48 litre per sec. by Di Fenizio 'Sulla portata degli antichi acquedotti romani e determinazione della quinaria,' *Giornale del Genio Civile*, lvi, Rome, July 1916). At the other end of the scale the four major Roman aqueducts, the Anio Vetus, the Marcia, the Claudia and the Anio Novus could all deliver over forty million gallons a day.

(iii) *The Lucus Feroniae Plain* (fig. 22, p. 190)

The special difficulties of fieldwork in the Lucus Feroniae plain have already been explained (p. 191). The treatment here can at best be a patchwork of sporadic evidence, particularly as the course of the Via Tiberina north of the town has not been found. This is really the main problem of the area, but it is now unlikely to be solved without the help of some fortuitous discovery. The road is last seen at Lucus Feroniae following a course slightly east of north, and its continuation can be traced on air photographs close to La Cascina Poggi (pl. XXXVIII, *a*). It is then completely lost in the plain. One can, however, obtain a rough idea of the line it must have followed from a short section of road cutting on the northern side of the Valle dell'Inferno, north-east of Fiano (021723), five kilometres from Lucus Feroniae. This suggests that the line of the Via Tiberina ran roughly through the group of sites on Campo Maretto.

The sites located here described from east to west. Fortunately the shallow cutting of the Autostrada del Sole, running along the eastern edge of the plain, has offered a unique chance of locating buried sites. Close to Lucus Feroniae along this line the pottery scatter is too dense to allow the identification of individual nuclei, but beyond the *casale* of La Cascina Poggi traces of eight sites appeared in a little over five kilometres. Though none of them is large enough to be of special interest, they give some idea of the density of settlement in the Roman period, being widely scattered in the centre and more closely grouped at either end, near Lucus Feroniae and at the point where the Via Tiberina crossed the Valle dell'Inferno below Fiano (sites **242–9**).

East of the Autostrada the position of two sites (**250, 251**) perched on the final travertine scarp overlooking the bed of the Tiber suggests that there may have been a Tiber-crossing at this point in antiquity, just as there is a small ferry-boat today. The position is topographically important as a link with the Passo Corese area and, in particular, a prominent ancient route along the eastern side of the Tiber that debouches on to the valley-floor immediately opposite the suggested river-crossing (pl. XLIII).

242 024687. The remains of a medium-sized site beside the cutting of the Autostrada del Sole, immediately north of the Fosso dei Ponticelli.
Terra sig. (1 sherd); coarseware. B.T.

243 025692. Ruined cottage overlooking a small Roman site.
Coarseware. B.T.

244 028694. Small travertine shelf with a scatter of Roman material.
Coarseware. B.T.

245 031711. Scatter of pottery from a medium-sized site appearing in the Autostrada cutting in the Macchia di Sterpete.
Coarseware. B.T.

246 031712. Wall of coarse travertine blocks visible in the Autostrada cutting 20 cm. below ground level. It measured 0·80 m. wide by 0·65 [illegible] thick.
A little coarseware.

247 030714. Scatter of pottery from a site in the centre of the Macchia di Sterpete.
Terra sig. (1 sherd); coarseware.

[illegible] 027718. Small site in the dense scrub at the northern edge of the Macchia di Sterpete.
Coarseware. B.T.

249 026720. Pocketful of sherds from the west side of the Autostrada cutting.
Coarseware. Amph. B.T.

250 0035720. Medium-sized site [illegible] a shelf overlooking the Tiber flood-plain. Much building material from the site has been incorporated in field-walls nearby.
Coarseware. B.T.

251 034724. Small nucleus on a shelf of travertine overlooking the Tiber. It [illegible] perhaps related to site **250**.
Dolium. B.T.

The central area of the plain is occupied by the Macchia di Sterpete and Campo Maretto. The latter contained a group of sites loosely grouped round a large nucleus (**252**) occupying a small shelf of travertine (Spot Height 86 m.) which projects a metre or so above ground-level. This important site is the only one that yielded a wide variety of Roman material; the others are mainly insignificant scatters of tile and coarse pottery. One (**253**) lies immediately south of the main nucleus and perhaps belonged to an outbuilding. Two others (**254, 255**) were found to the west, and a string of four sites (**256, 257, 258, 259**) leads south-west across il Palombaro, the southern flank of Campo Maretto, towards Ponte dell'Arme, where the Fiano road crosses the Fosso dei Ponticelli.

[illegible] 020697. The main site of the area in the centre of the Campo Maretto, [illegible] a projecting travertine shelf.
Coarseware. Dolium. Amph. B.T.; curved tile.

[illegible] 020696. Small pocket of material, perhaps representing an outbuilding of the main site (**252**).
Coarseware. B.T.

254 018697. Site on the western side of the Campo Maretto.
Red Polished ware; coarseware. B.T.

255 017697. Tiny scatter of Roman coarseware on the N.W. edge of the Campo Maretto.
Coarseware. B.T.

256 017693. Scatter in the centre of La Palombara.
Red Polished ware; coarseware. B.T. Travertine block, 50×40×80 cm.

257 016692. Ploughed-out nucleus on the southern side of il Palombaro.
B.T. *Tubuli.* Clinker.

[illegible] 015689. A very small pocket of tile, fifty metres from site **259**.

259 014689. Small scatter east of the Ponte dell'Arme, where the papal road to Fiano crosses the Fosso di Ponticelli.
Coarseware. B.T.

The other main group of sites lies along the northern edge of the plain to the west of Macchia di Sterpete. A small scatter of Roman material (**260**) was found [illegible] the

western edge of the *macchia*, and another (**261**) nearby on the eastern edge of the track from Fiano. Two small sites (**262, 263**) occurred on the eastern and southern sides of Vigna Marsicola, alongside the track running westwards to Capocroce. Half a kilometre to the north-west the masonry rubble of a small Roman building (**264**) can be seen close to an electricity pylon on the western edge of a small valley that joins the Valle dell'Inferno. At the road junction south-west of Fiano traces of another site (**265**) have been uncovered by recent construction work close to the Fontanile Materno. Further west, at the foot of a projecting spur of M. Belvedere, two, probably related, sites (**266, 267**) overlook the northern edge of the plain.

021711. Small scatter of brick and tile at the western fringe of Macchia di Sterpete. No pottery.

261 019711. A few fragments of Roman brick and tile at the end of Vigna Marsicola, on the eastern side of the cart-track from Fiano.

262 018709. Scatter of pottery and building-material on the eastern edge of Vigna Marsicola.

263 016707. Small nucleus of Roman debris beside a track on the southern side of Vigna Marsicola.
Coarseware. B.T.

013711. Masonry rubble, brick and tile of a small Roman building close to a modern electricity pylon.

008713. Roman building material, apparently *in situ*, uncovered by modern construction work on the eastern side of the papal road to Fiano, just short of Fontanile Materno.
B.T. Travertine blocks.

266 006711. Nucleus of a medium-sized building occupying a small crest on the lower slope of Belvedere.
Coarseware. B.T. Travertine blocks.

267 044711. Scatter of Roman building material on the lower slope of Belvedere, probably associated with site **266**.
Coarseware. B.T.

The central and southern section of the plain to the west of the modern Fiano road was not densely populated in antiquity and few sites survive in the immediate vicinity of Lucus Feroniae (p. 197). The nearest (**268**) lies nearly a kilometre to the north-west, close to the presumed line of the ancient road linking Lucus Feroniae to Capena. Like the Via Tiberina (see above, p. 201), the latter is now unlikely to be located in the course of ordinary fieldwork. Its course, however, is more certain than the Via Tiberina. The Superintendency excavations show that it left the northern end of the forum as a paved road following a north-westward alignment. Three kilometres away its course has been traced for a kilometre and a half through the saddle that separates M. Ruzzola from M. Belvedere. In the gap between these two known points the route probably followed an almost straight course, and a dark line suggestive of a buried road does in fact appear near Monte San Lorenzo on some air photographs taken in 1943. On this line the road must have passed close to three sites (**269, 270, 271**) that have also been reduced to thin scatters of pottery by intensive ploughing.

The dams of the Aqua Augusta on the Fosso di Gramiccia have already been described (pp. 197–9). The neighbourhood was quite heavily populated in antiquity. A pair of sites (**272, 273**) lay beside the dams on the south side of the river, and again on the southern bank the remains of a cistern mark the position of a substantial building (**274**) a kilometre downstream. Air photographs show that these sites on

the south side of the Fosso di Gramiccia were connected by a *diverticulum* (apparently unpaved) leading down to the Tiber valley and the lost Via Tiberina. The main group of sites, however, occupies the southern slopes of Monte San Lorenzo. A much-ploughed nucleus (**275**) occupied a small spur two hundred metres north of the dams, and another lay to the north-west (**276**). The latter was probably related to a medium-sized building (**277**) set at the foot of the southern spur of Monte San Lorenzo. Three hundred metres further up the east bank of the river, under the Sasso di Fiano, lay the most important site of the group (**278**). What gives the structure its interest is that the foundations themselves contained a group of four cisterns, two parallel to, and two at right-angles to the front of the building (fig. 26). On the hillcrest above, the remains of two other sites (**279, 280**) were located; the latter was perhaps only an outbuilding.

268 007678. Large ploughed-out site beside the cart-track running southwards towards Molino di Fiano.
Coarseware. B.T. (incl. curved tile); painted wall-plaster (yellow, red, black).

269 005688. General scatter from a nucleus completely dispersed by heavy ploughing.
Black-glazed and coarsewares.

270 007686. Site under plough. Coarseware only.

271 009686. General scatter of Roman material from a site at the northern edge of Le Cese.
Coarseware. B.T.

272 996674. Large ploughed-out nucleus 150 m. S.E. of the Aqua Augusta dam, across the Fosso [illegible] Gramiccia. A fragmentary mortar tank is visible [illegible] the northern edge of the site.
Coarseware. Dolium; travertine blocks; B.T.

273 994674. Small building-nucleus slightly to the north of site **272**, 75 m. west of the Aqua Augusta dam, across the Fosso di Gramiccia.
Coarseware. Amph. B.T.; travertine blocks.

274 004669. The cistern of a substantial [illegible] [illegible] the south bank of the Fosso di Gramiccia, opposite Molino di Fiano. The overgrown structure (approx. 2·50×5·20 m.) is built of small travertine blocks and light grey mortar.
Red Polished and coarse wares. B.T.

275 996678. Heavily-ploughed scatter from a site 200 [illegible] north of the Aqua Augusta dam. Some limestone blocks belonging [illegible] the site have been removed to the farm beside the stream.
Coarseware; B.T.

276 992677. Small nucleus of Roman material on a slight spur overlooking the north dam of the Fosso di Gramiccia.
Coarseware; B.T.

277 991678. Medium-sized site [illegible] the edge of the main southern spur of Monte S. Lorenzo.
Black-glazed ware; *terra sig.*; Red Polished and [illegible] wares. Amph. Dolium. Travertine reticulate *tufelli*; window glass; [illegible] tesserae.

278 990688. Foundation platform (24·45×16·20 m.) of a medium-sized building on the slope below Sasso di Fiano, overlooking the floor of the Fosso di Gramiccia. The interior contains the four cisterns shown in fig. 26 and described below.
Terra sig.; Red Polished and coarse wares. B.T.

The surviving masonry forms the substructure of a medium-sized building on the gentle slope beneath Sasso di Fiano, overlooking the floor of the Fosso di Gramiccia. The structure cleared by the plough consists of a rectangular foundation measuring 24·45 m. by 16·20 m. and is built of small limestone blocks and light grey mortar. The front (S.W.) edge lies at an angle of 151° and has been exposed to a depth of 98 cm. Attached to the northern side of the main structure are the ploughed-out remains of at least two rooms, measuring 4·10 m.×3·90 m. and 3·10 m.×3·10 m. respectively. A third room probably completed the series along the north side of the building.

The foundations were honeycombed by four cisterns (for plan, see fig. 25) whose presence was revealed by three blocked access-shafts set in the main foundations. On the northern

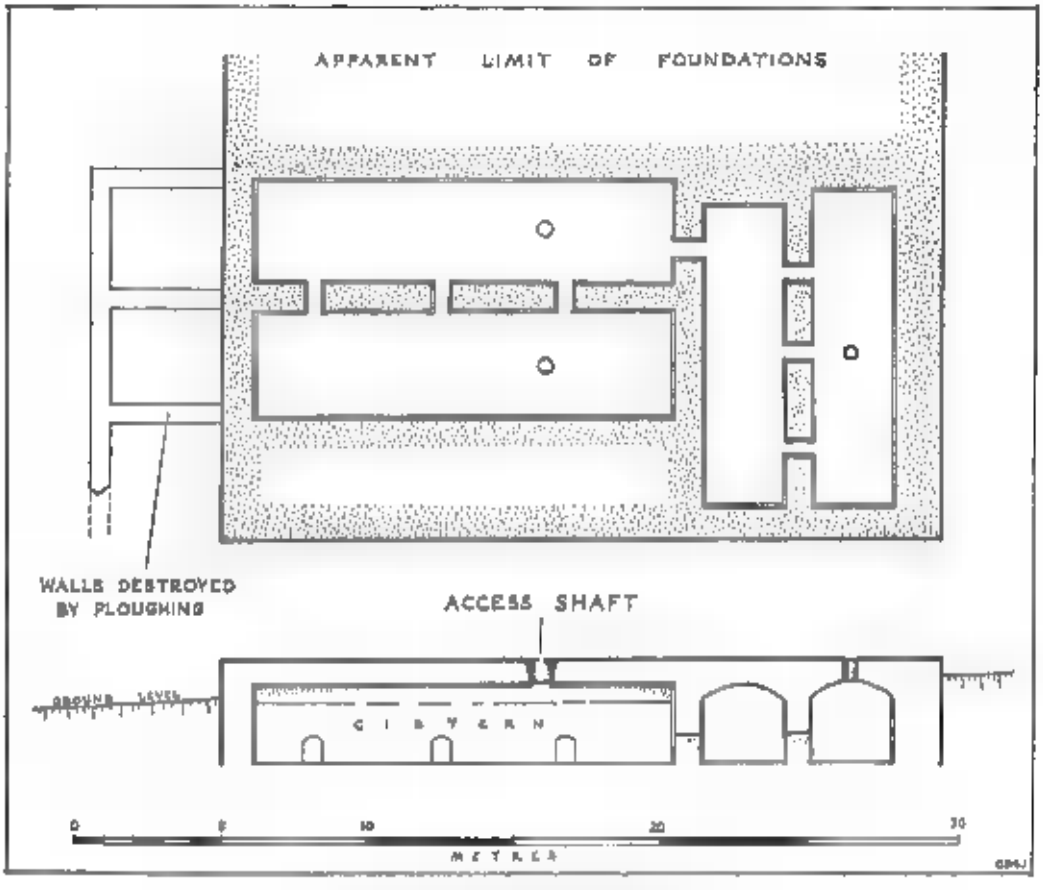


FIG. 25. CISTERNS AT SITE 278

side lie a pair of identical barrel-vaulted cisterns (14·40 m. × 3·68 m.) separated by a 60 cm. wall. These run parallel with the front of the building and the water-pressure is equalized by three small interconnecting arches. At the southern end of the inner cistern another small arch gives access to two slightly irregular cisterns (10·45 × 2·80 m. and 10·85 × 2·90 m. respectively). These are set at right-angles to the other pair of cisterns and are again separated by three interconnecting arches to balance the water-pressure. Little detritus has entered the cisterns; their original height was a little over 2·70 m. The southernmost cistern and the northern pair had circular (0·60 m.) shafts in the roof through which water could be drawn.

279 992685. Site being eroded from the southern crest of Monte San Lorenzo.
Coarseware. B.T.

280 993683. Small nucleus, perhaps of an outbuilding, at the head of a small re-entrant on the S.E. hill slope.
A very small quantity of coarseware. Fragments of tufa and limestone ashlar.

The M. Ruzzola–M. Belvedere ridge is divided in the centre by a small saddle through which passed the road linking Lucus Feroniae to Capena. Most ancient settlements lay close to its route, but on both sides the ridges were dotted with sites.

Four lay [redacted] the southern slopes of M. Ruzzola, two (**281, 282**) on the south-western, two (**283, 284**) on the south-eastern spur. The road first becomes faintly traceable in the re-entrant east of M. Ruzzola. Beside it, on a projecting platform, lies the nucleus of a substantial site that yielded a *dupondius* of Commodus dated to A.D. 178 (**285**). The road crossed the saddle, partly in a shallow cutting, partly in a terrace. Its line is marked by three almost contiguous sites (**286, 287, 288**) which lie along its southern side. None of these is of any great importance, unlike the next site (**289**), which lay in the valley floor where the road crossed the Fosso di Lago Puzzo. It descended the hillside in [redacted] gently curved terrace (sometimes as deep as 2 m. on its upper side) and passed beside the site on a small shelf fifty metres from the stream. The discovery of Etruscan impasto and coarse wares at this point shows that the road is pre-Roman in origin (pp. 180, 181). After crossing the stream, the route then continued towards Capena along the southward extension of M. Pacciano, and is described in another section (p. 187).

North of the line taken by the road, occupation extended along the crest of M. Belvedere, although the present dense woodland makes it difficult to be sure that all the ancient sites have been located. An overgrown cistern (**290**) marks the position of a building slightly north of the crest of M. Belvedere. Two hundred metres further on there are traces of another (**291**), and the largest of the groups was found beside a ruined *casale* set in a small ridge-saddle (**292**). To the north-west a small nucleus (**293**) occupies the crest of a lateral spur. The last sites are only a few hundred metres from the large and important villa set on [redacted] platform overlooking the village of Fiano. This and the area to the north have been described in a previous section (p. 189).

[redacted] 987697. Poor site immediately below Spot Height 176, producedng a small quantity of building-material and pottery.
Coarseware. Amph. B.T.; travertine blocks.

282 986701. Small site immediately south of the crest of M. Ruzzola. Three travertine blocks have been removed to the crest of M. Ruzzola.
Coarseware.

283 993696. Much-destroyed site on a platform half way down the S.E. spur of M. Ruzzola.
Terra sig. and coarseware. Amph. B.T.

284 991702. Medium-sized site on the slope of the ridge-crest 500 m. due east of M. Ruzzola.
Black-glazed ware; Red Polished ware; coarseware. B.T.

285 996699. Extensive scatter from a medium-large site above Raseto, on the southern slope of M. Belvedere.
Terra sig., Red Polished and coarse wares. Large blocks of travertine, [redacted] moulded. Melon bead in blue and black glass. Dupondius of Commodus, A.D. 178. Obv., head radiate r.: L. AUREL COM(M)OD(US AUG TR.P III). Rev., Libertas standing l. holding *pileus* and rod: (LI)BERTAS (AUG IMP II COS PP SC).

[redacted] Ploughed-out nucleus in a vineyard beside the remains of the road-terrace. A limestone and mortar wall is visible in section.
Black glazed ware; *terra sig.*; Red Polished and coarse wares. Amph., dolium. B.T.

287 989707. Small site in a vineyard beside the shallow road-cutting.
Terra sig., Red Polished and coarse wares. B.T.

288 988707. Scatter of Roman material beside the road-cutting, halfway up the hillside.
Black-glazed, Red Polished and coarse wares. Amph. B.T.

289 985708. Etruscan site close to Fontanile di Fontana Fistola, at the foot of the road-cutting that drops from the M. Ruzzola–M. Belvedere saddle; it must originally have overlooked

the crossing of the Fosso di Lago Puzzo. It shows that the road from Capena to Lucus Feroniae belongs in origin ■ the Etruscan period.

Etruscan impasto and coarse wares. B.T.

290 995708. Overgrown cistern, indicating a small site slightly north of the crest of M. Belvedere. It is made of limestone and mortar, and is roughly square in shape (3·50 × 3·20 m.), the longer side lying at an angle of 285°.

Coarseware. B.T.

291 996710. Small nucleus of Roman material 200 m. south of site **292**.

Terra sig.; Red Polished and coarse wares. *Op. sig.*

292 996712. Large site covered by grass, ■ a saddle in the M. Belvedere ridge; it lies ■diately south of a ruined *casale*.

Black-glazed ware; *terra sig.*, Red Polished and coarse wares. B.T.; small white tesserae.

293 994715. Small site on a lateral spur of M. Belvedere.

Black-glazed ware; Red Polished and coarse wares. B.T.

G. D. B. Jones

INDEXES TO CAPENA AND THE AGER CAPENAS

I. INDEX OF NAMES AND SUBJECTS

II. INDEX OF ANCIENT AUTHORS AND INSCRIPTIONS

In this index are mentioned only such references as are the subject of original or important comment.

GENERAL INDEXES

I. INDEX OF NAMES AND SUBJECTS

II. INDEX OF ANCIENT AUTHORS AND INSCRIPTIONS

(Robert Dixon)

ROME, TEMPLE OF CASTOR AND POLLUX IN THE FORUM ROMANUM

(J.B.H.P.)

a. Podium

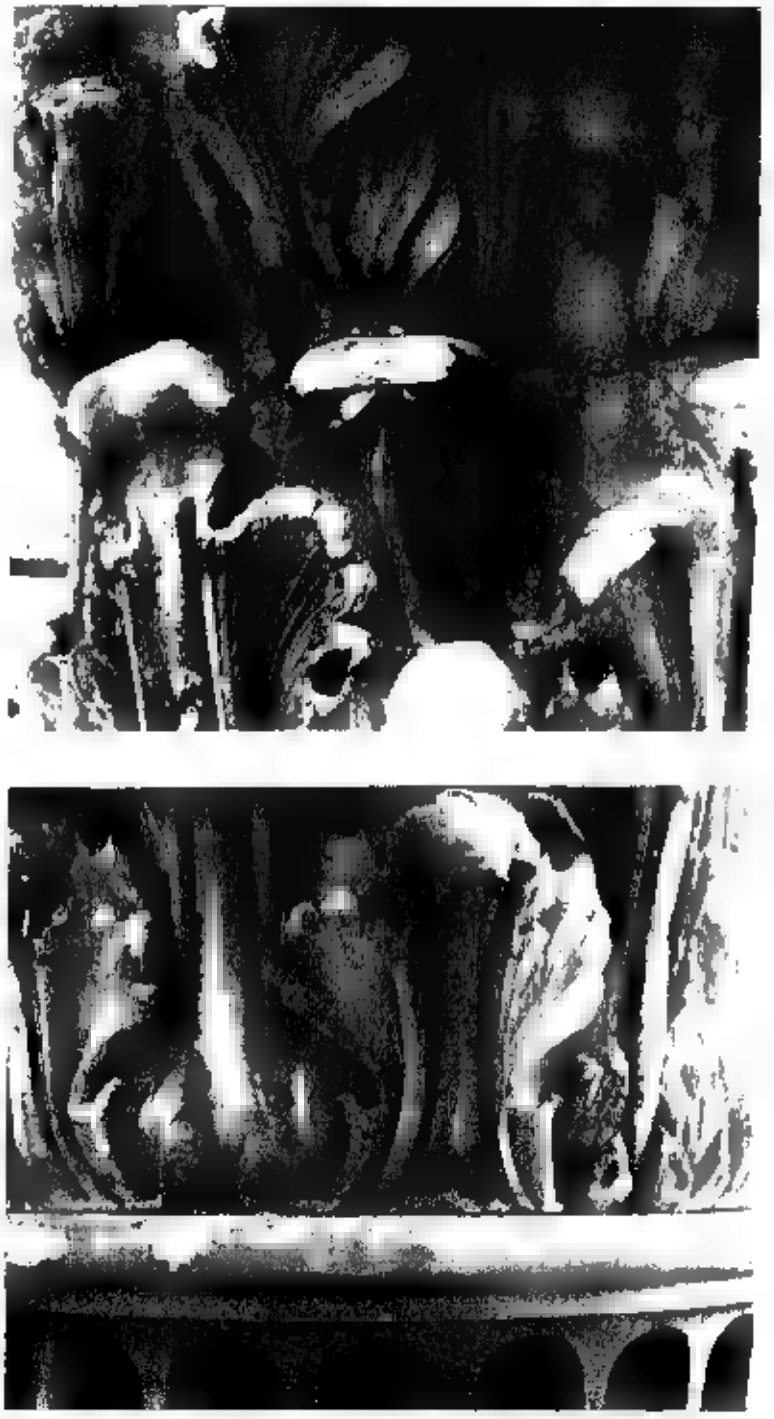
(J.B.H.P.)

b. Column-Base

Rome. Temple of Castor

PLATE II

ROME. TEMPLE OF CASTOR : CAPITAL

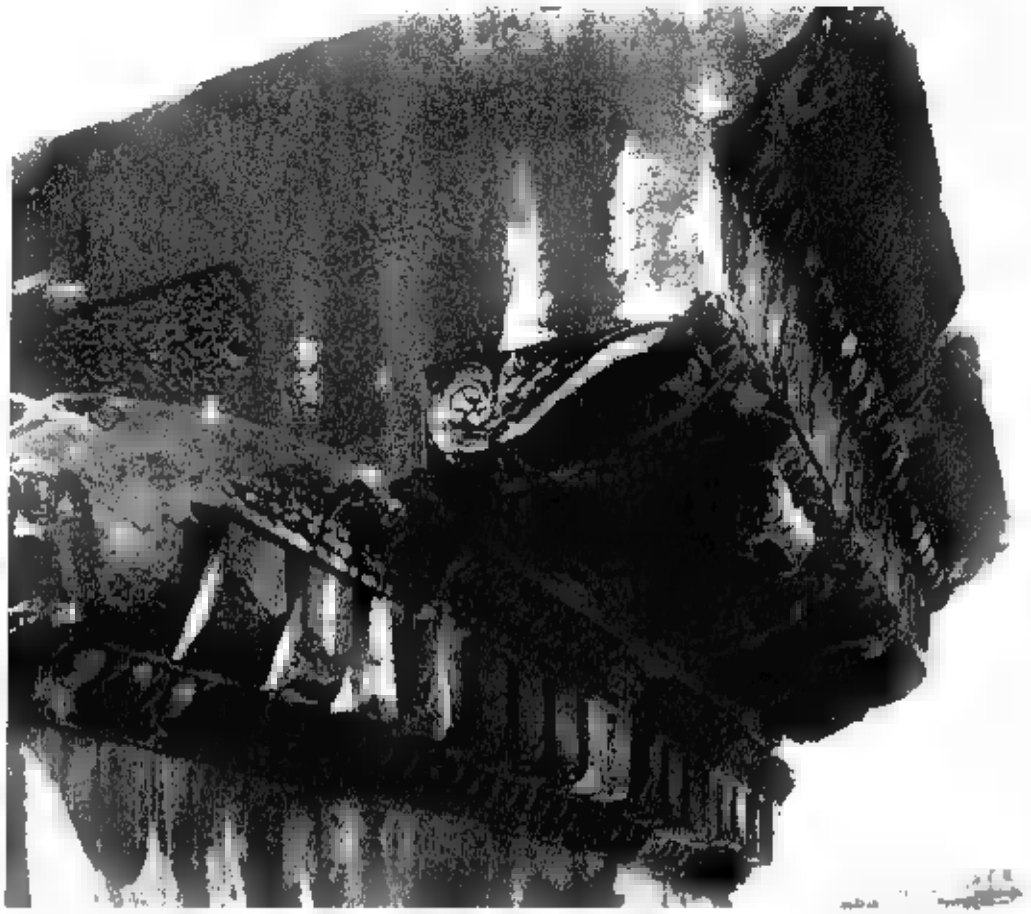


(*Photo: M.H.B.*)

ROME, TEMPLE OF CASTOR: DETAILS OF CAPITALS

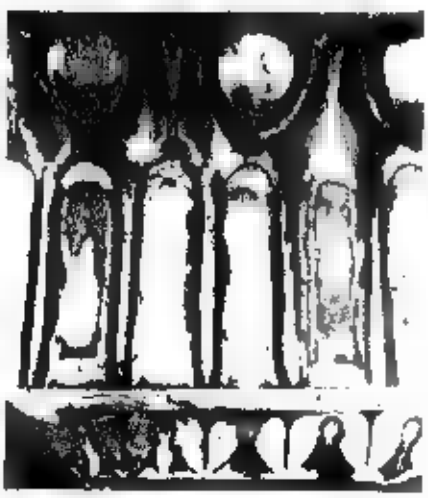
ALINARI

ROME. TEMPLE OF CASTOR: CAPITAL. DETAIL OF LEAF-CARVING



a. The Cornice

b. Detail of Cyma Reversa [M.H.B.]



c. Detail of Corona [M.H.B.]

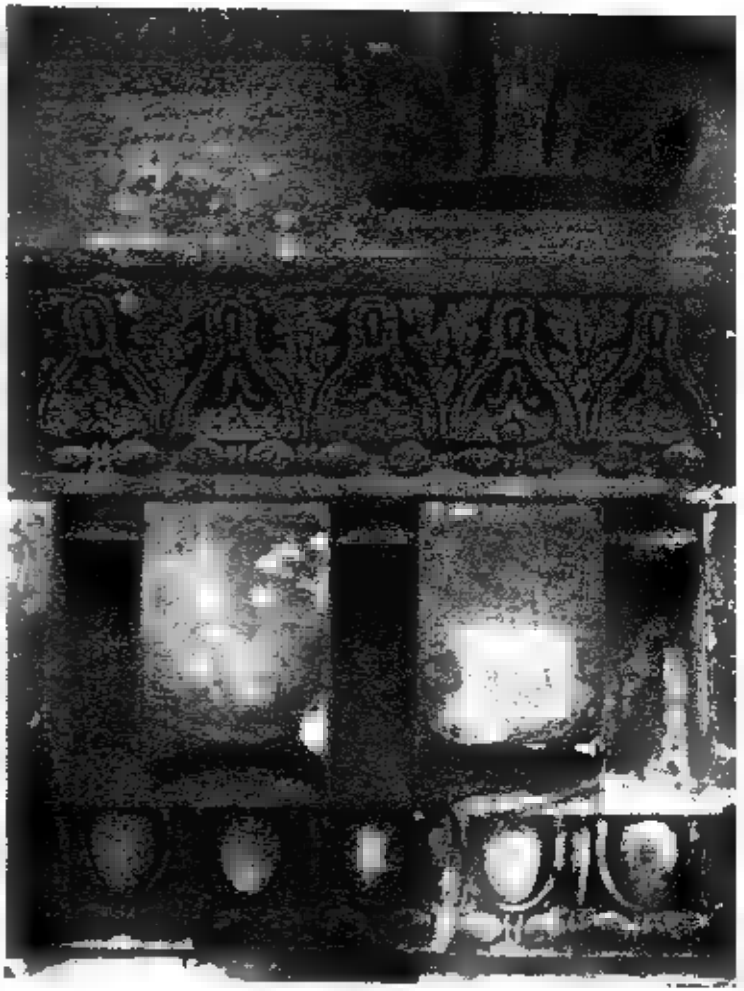
Rome, Temple of Castor

a. Interlacing Helices

b. Console

Rome, Temple of Castor

a. Part of Architrave



b. Part of Cornice

Rome, Temple of Castor

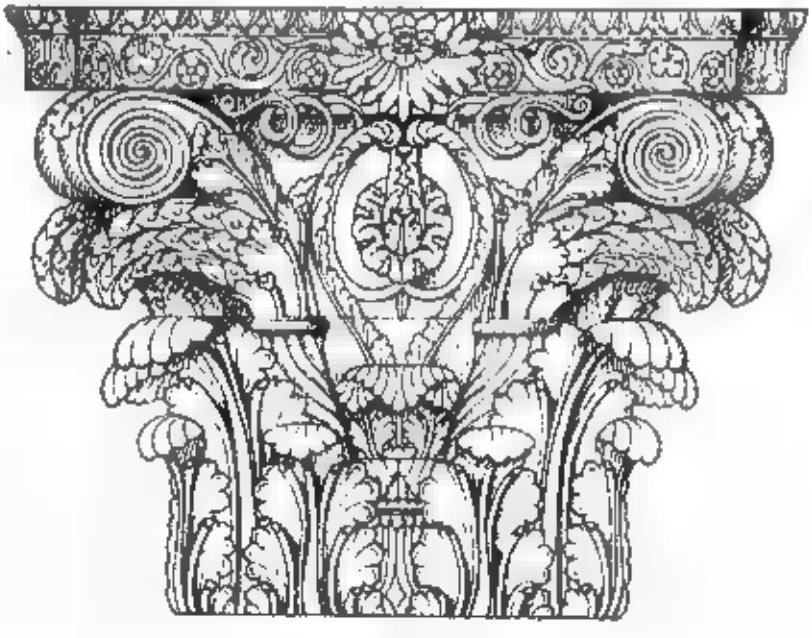
Plates Superintendent of Antiquities

a. Rome, Temple B in the Largo Argentina : Column-Base

b. Rome, Temple of Saturn : Column-Base

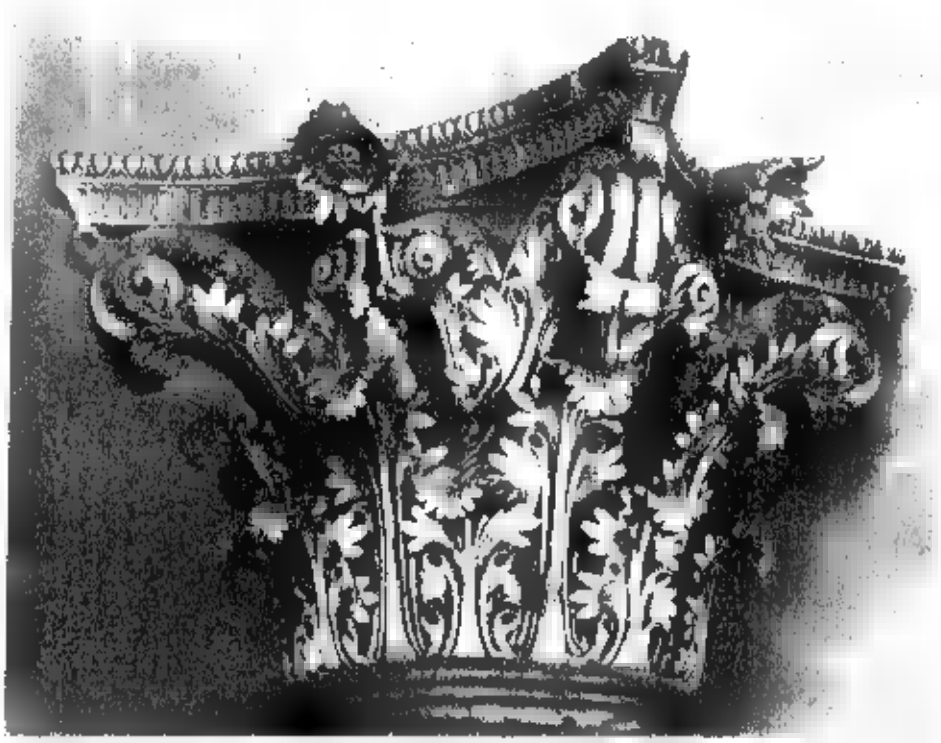
(*Courtesy de Rossi*)

a. Capital



b. Reconstruction Drawing of Capital, by R. Falconi
Rome, Temple of Apollo in Circo

Rome, Temple of Mars Ultor : Capital



a. Capital from the Tiber near Tordinona

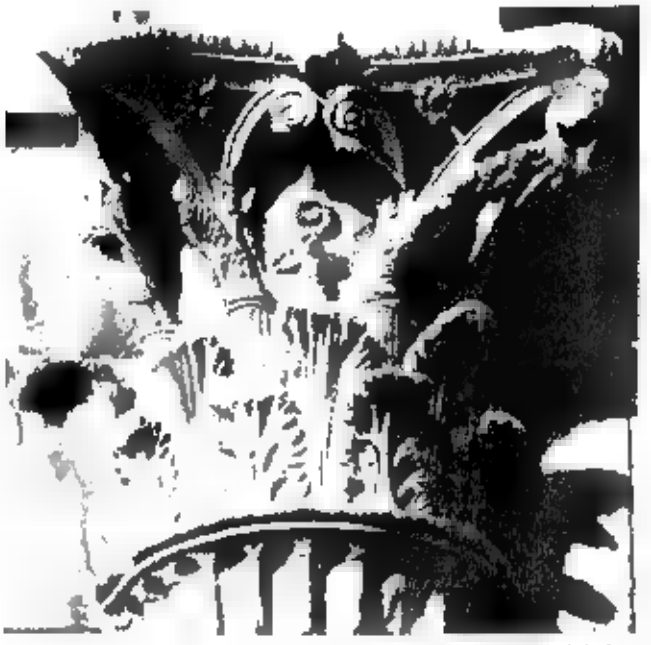
b. Rome, Capital from the Basilica Aemilia

(D.A.I.)

a. Rome, Forum Augustum : Capital

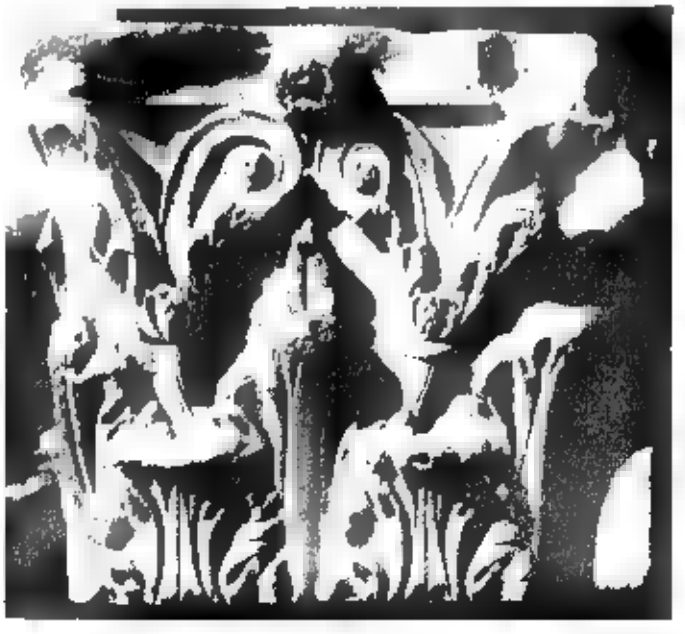
(A.F.W. D.C.P.)

b. Rome, Temple of Divus Julius : Fragment of a Capital



Anderson, Brogi, Photo.

a. Rimini, Arch of Augustus: Capital

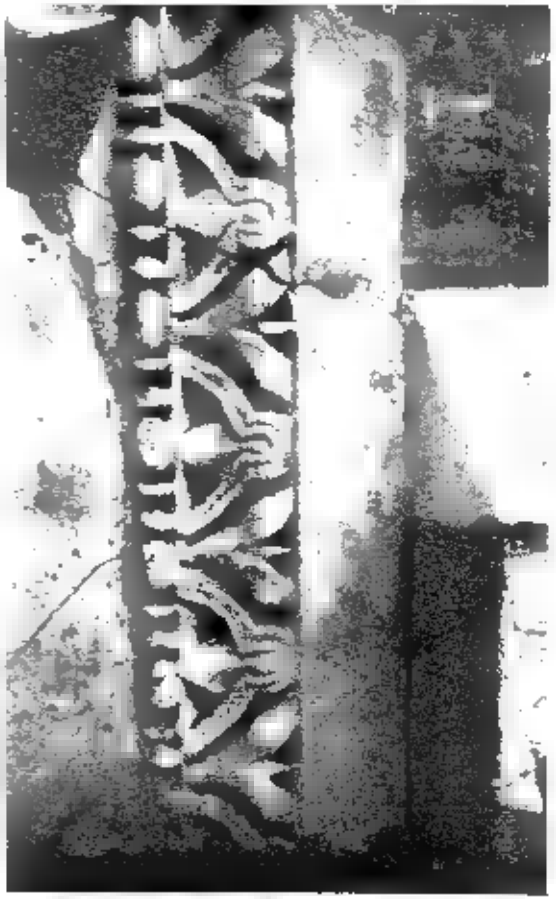


Alinari, Photo.

b. Ostia, Temple of Rome and Augustus: Capital

(Comune di Roma)

a. Rome, Temple of Apollo in Circo: Detail of Cornice

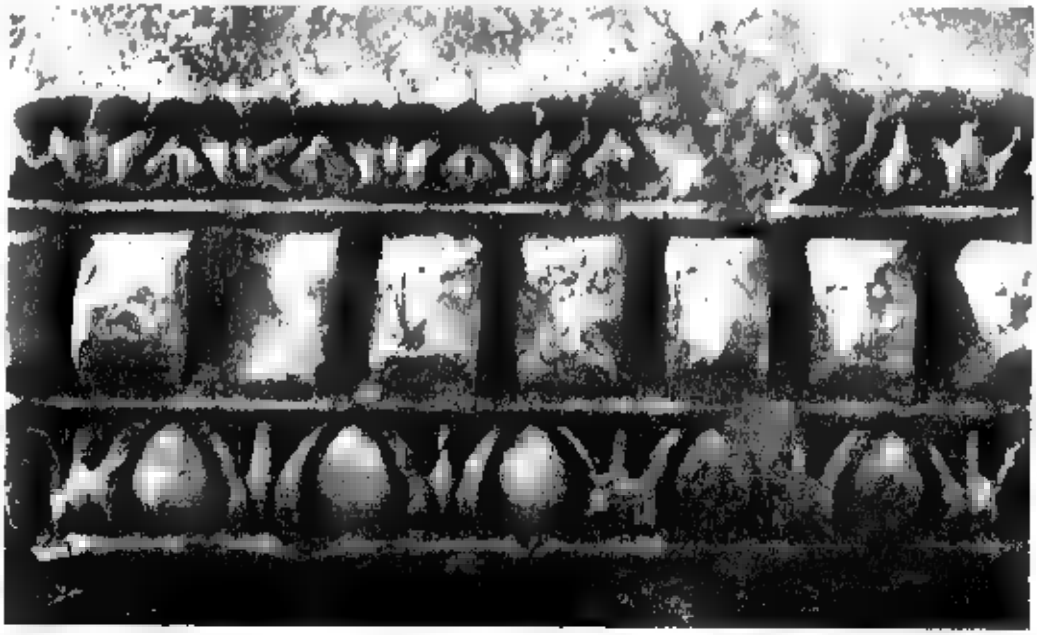


(*I.R.U.C.P.*)

b. Rome, Basilica Aemilia: Detail of a Door-Jamb

PLATE XX

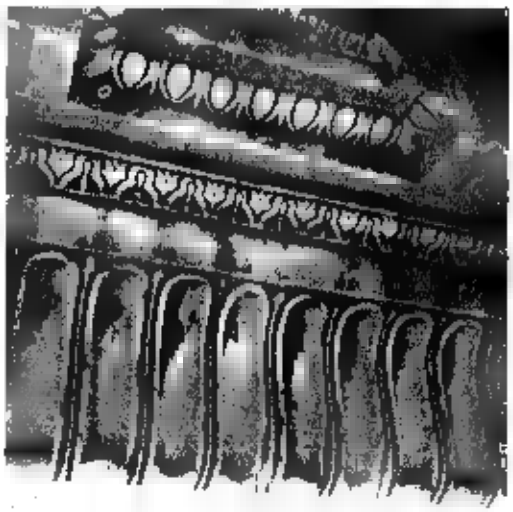
a. Rome, Forum Augustum : Detail of a Cornice



b. Rome, Arch of Tiberius (?) : Fragment of a Cornice

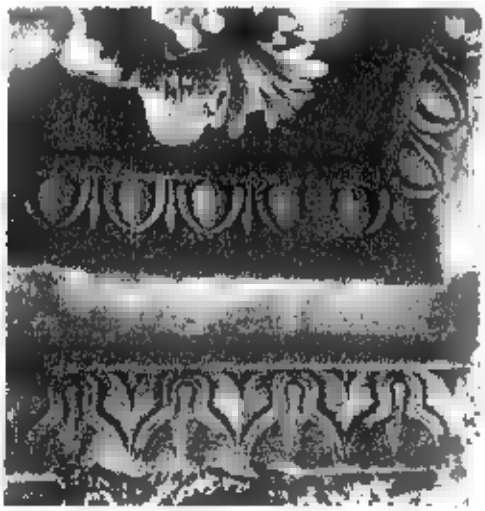
(Gnomon de Rome)

a. Forum Augustum, Detail of Caryatid Order



(J.B.W.P.)

b. Forum, Detail of Caryatid Order



(J.B.W.P.)

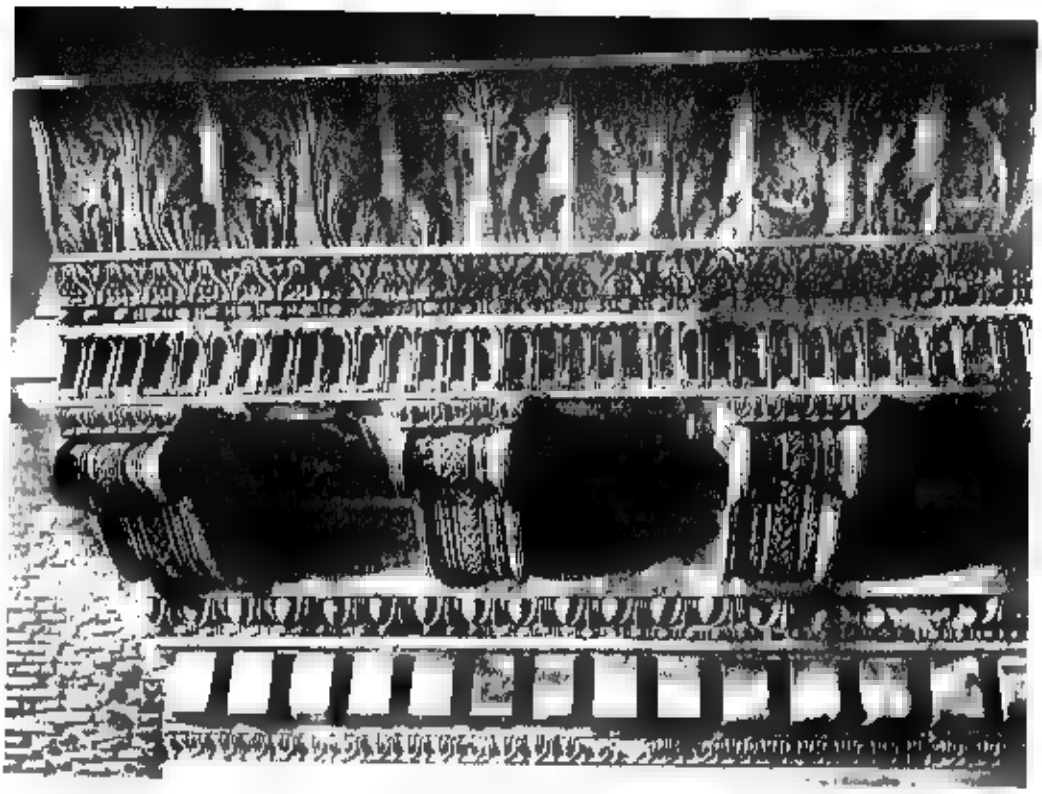
c. Temple, Coffering of Cornice

Rome, Forum Augustum and Temple of Mars Ultor

(Academy of Rome)

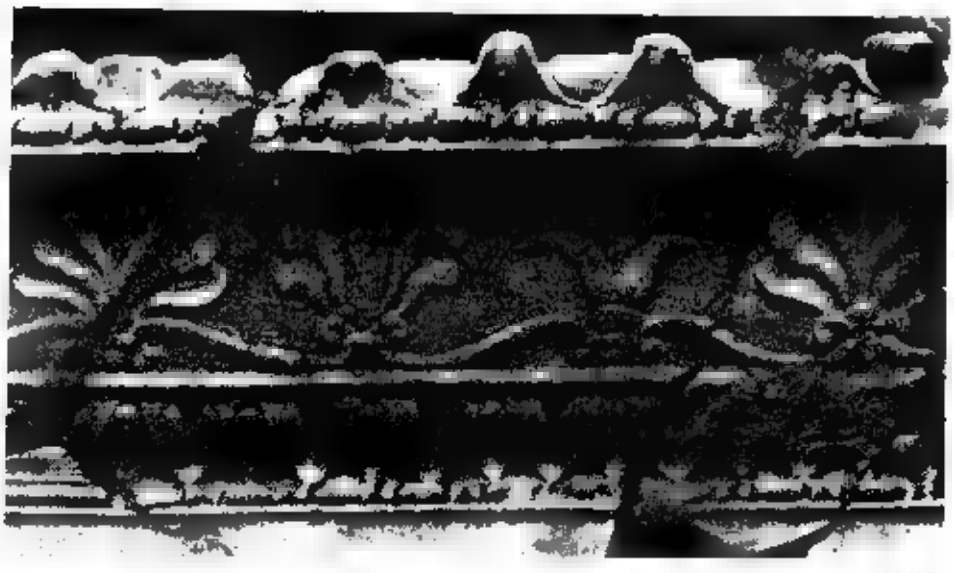
ROME, TEMPLE OF MARS ULTOR : COFFERING OF PERISTYLE

PLATE XVIII



(Alinari)

ROME, TEMPLE OF CONCORD: CORNICE



(M.A.B.)

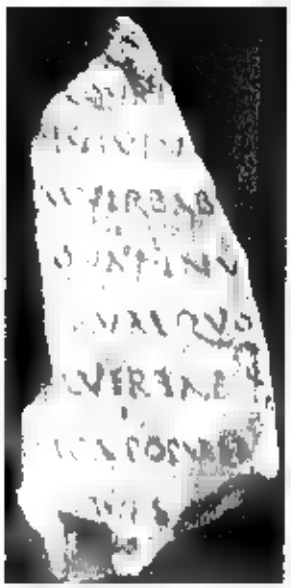
ROME, BASILICA AEMILIA: PART OF CORNICE OF LOWER ORDER

a. Palazzo Ducale, Mantua: Frieze Depicting a Battle between Romans and Gauls

(Photo: Superintendence of Galleries, Mantua)

b. Detail of the Same Frieze

INSCRIPTION OF Q. CAECILIUS APELLINARIS AT CASALE SANTA CORNELIA, NEAR VEII (p. 31)



(Photos: Department of Antiquities, Cyrenaica)

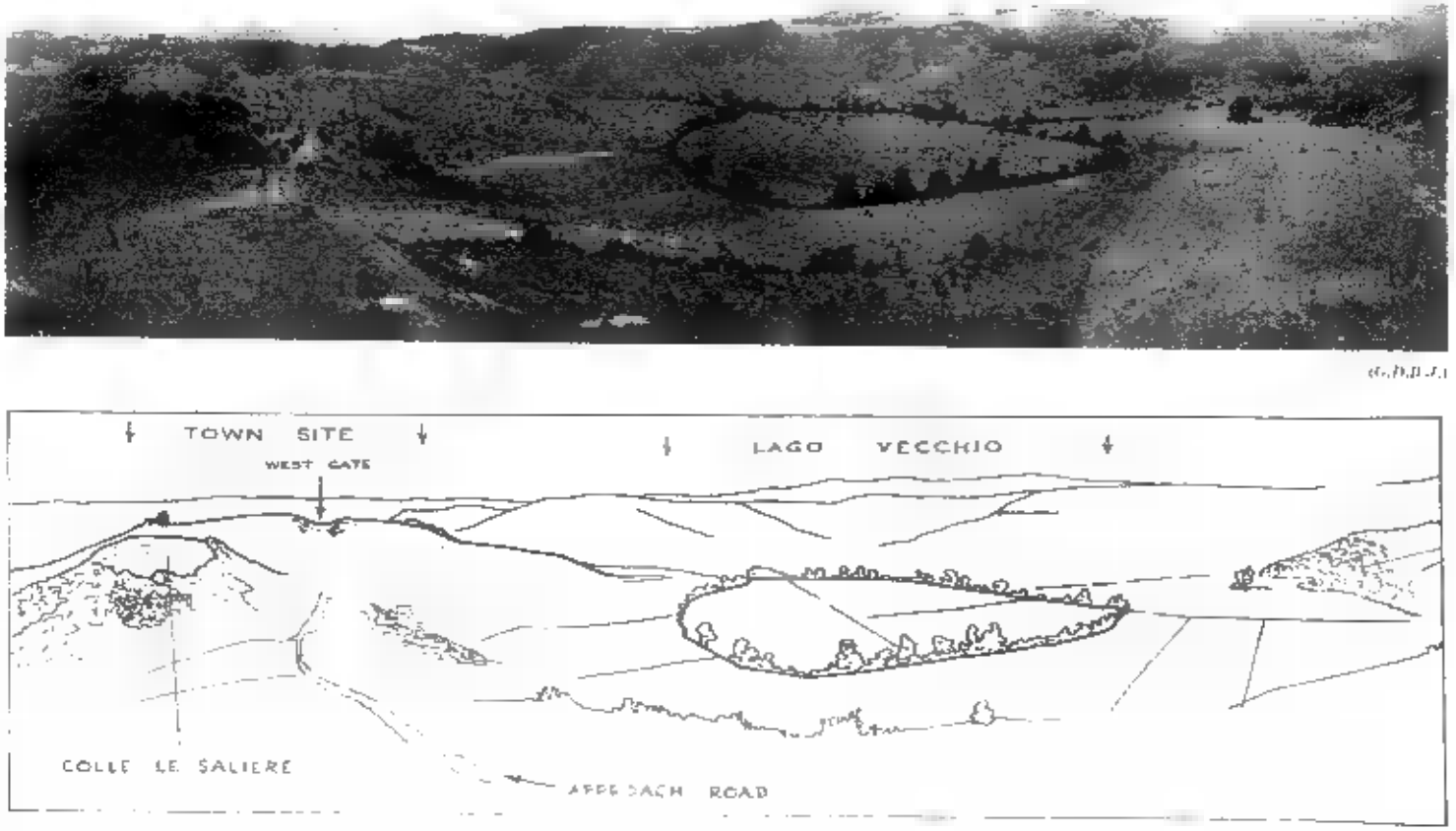
Vota Pro Salute Principis (pp. 33–37): *a* (*left*) at Cyrene; *b* (*right*) at Ptolemais

(Photo: J.D. Dobias)

a, b. Inscriptions of *Cohors Macedonica* at Cyrene (p. 37)

(Photo: Dipartimento di Antichità, Cracovia)

c, d. Inscriptions of a Vexillation of *Legio III Augusta* at Ptolemais (p. 39)



THE SITE OF CAPENA, FROM THE WEST

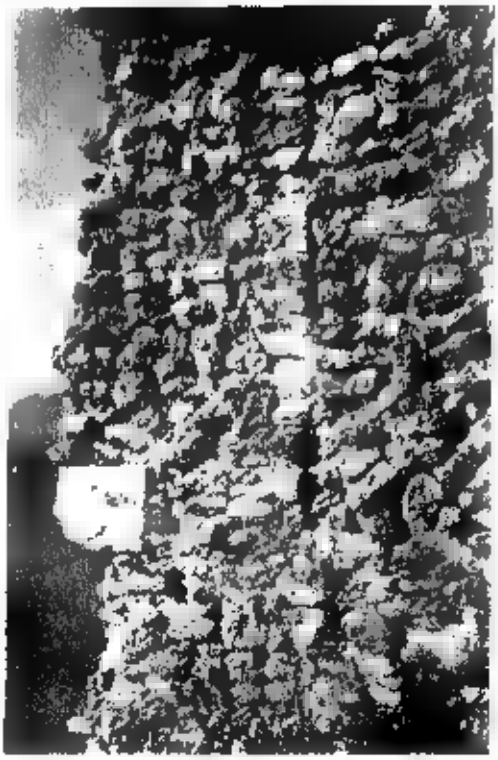
Gabinetto del Medaglie

a. CAPENA (*cf.* fig. 3) *(arrows mark line of ramparts)*

(M.H.B.)

b. CAPENA FROM THE SOUTH-WEST

a. Capena : Republican Building of Castellaccio, from the West



b (left). South-West Corner of *a*

c (above). Section of Lower Rampart in Quarry Face

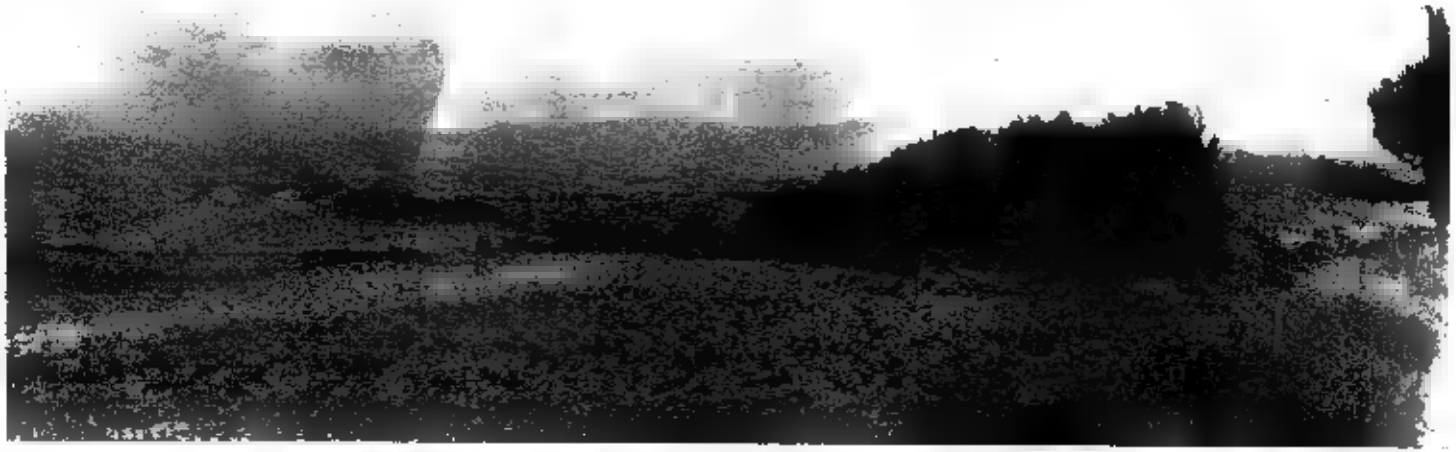
a. Capena : *Caniculus*, Main Channel (*cf.* fig. 1)

b. As Above, Junction with Blocked *Caniculus*

(Photo: M.H.R.)

Antefatto del Monetario

MONTE PALOMBO, FROM THE EAST (*cf.* pl. XLII)

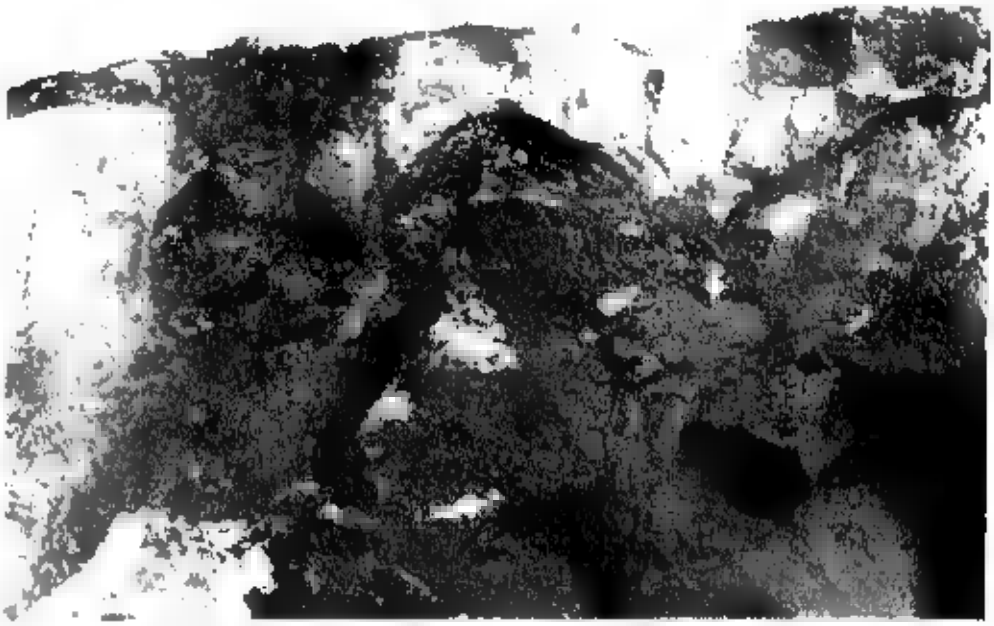


a. The Monte Palombo Ridge Road on the Acquabianca Ridge (*cf.* pls. XXVIII, XLII)

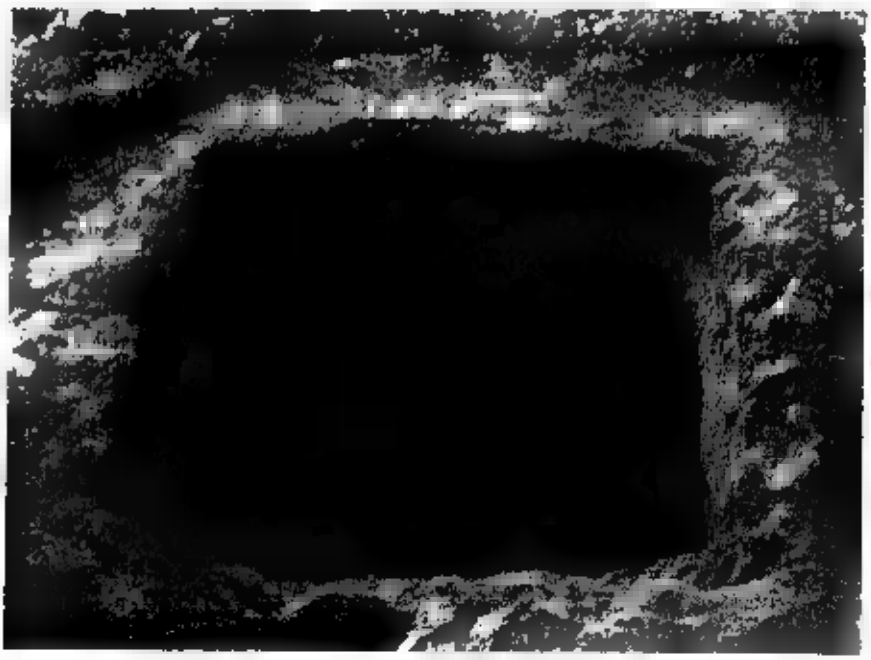
b. The Vaccherecchia Site (49) from Monte Palombo (*cf.* pl. XLII)

(Photos: G.D.B.J.)

PLATE XXIX



a. Grotta Colonna A (Site 40): Medieval Storage Pit in Quarry Face

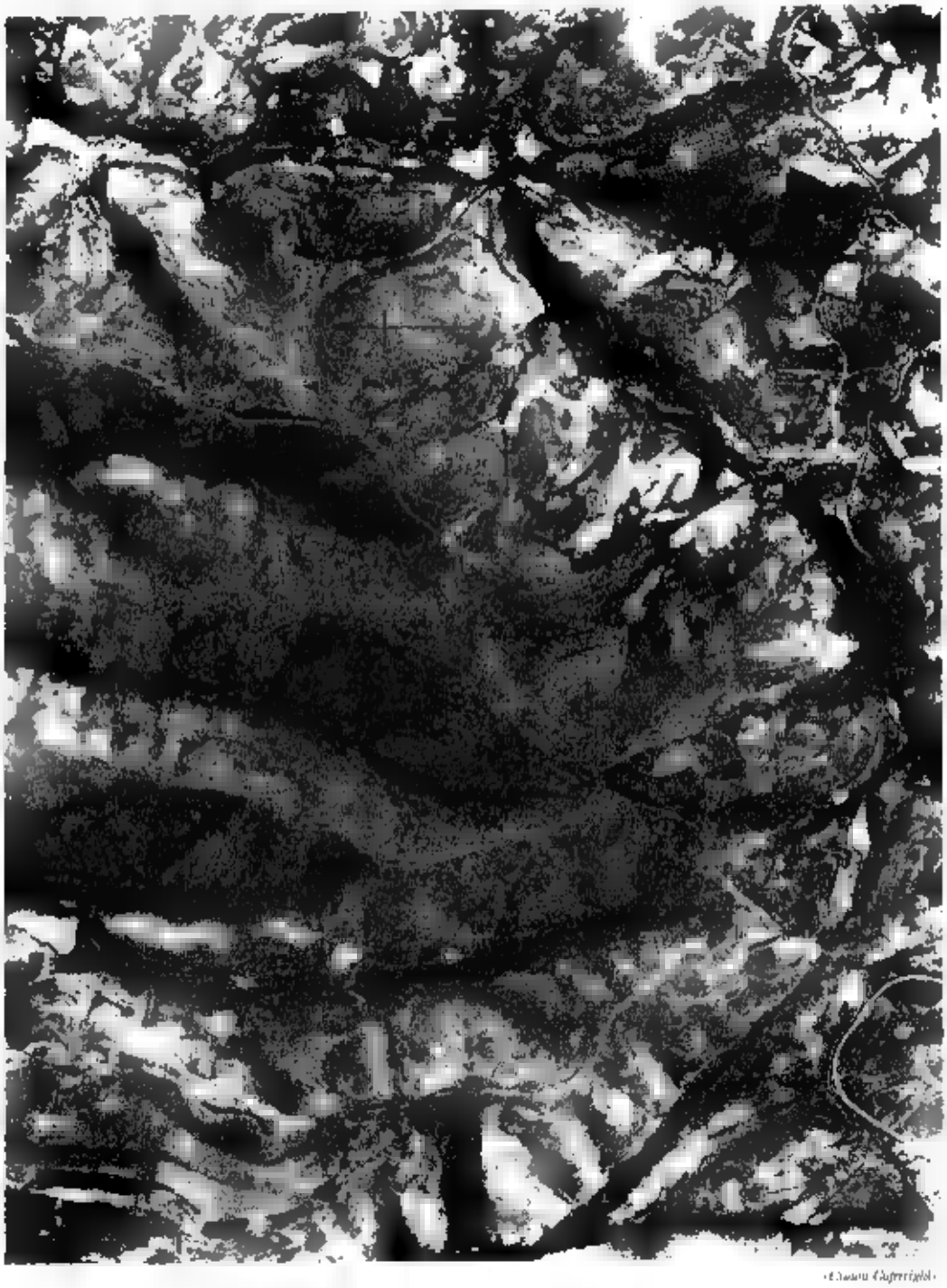


b. The Same: Top of Storage Pit, with Ledge for Closure Slab (*cf.* fig. 15)

(Photos: *G.H.R.A.*)

a. Cutting on the Flaminia—Capena Road, near Morlupo

b. Cutting on the Capena-Lucus Feroniae Road, on Monte Pagliano



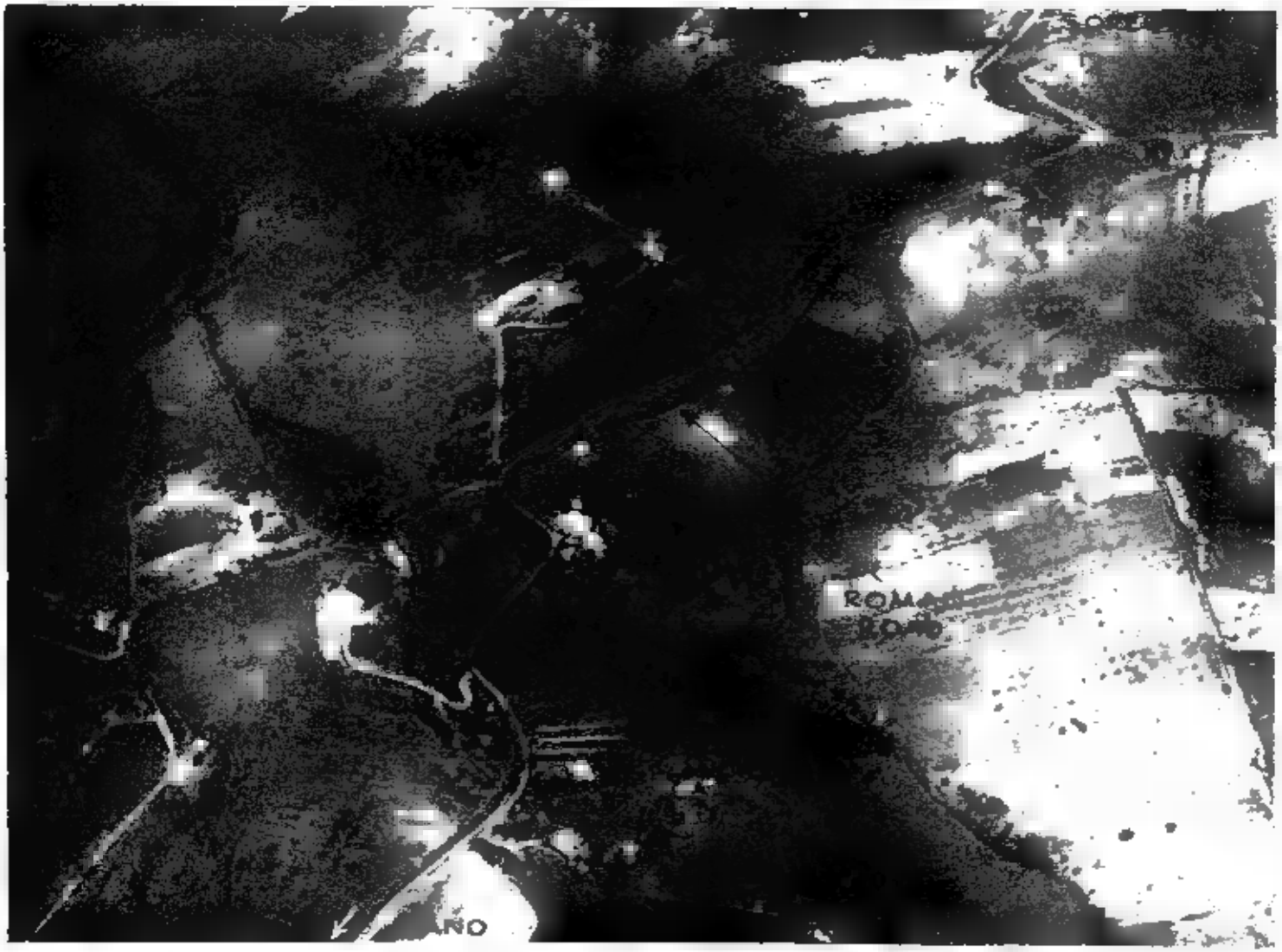
THE SOUTHERN PART OF THE FLAMINIA RIDGES (*cf.* fig. 1)

[Crown Copyright reserved.

THE SAN MARTINO RIDGE (*cf.* fig. 2)

a. The Giardino Villa (Site 217): Cistern on the East Side (*cf.* fig. 19)

b. San Martino: Road Cutting from the South-East (*cf.* pl. XXXIII)



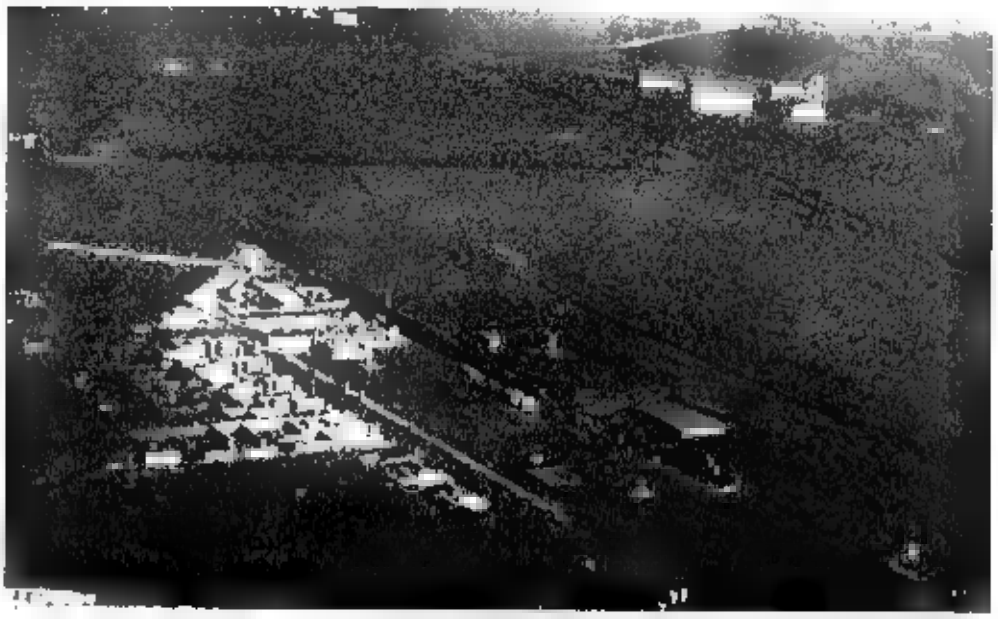
THE FLAMINIA-FLAMINIA ROAD FROM THE EAST (*cf.* fig. 22)

(*Archivio di Stato*)

PLATE XXXV

Aerofotocartografica dell'Aeronautica

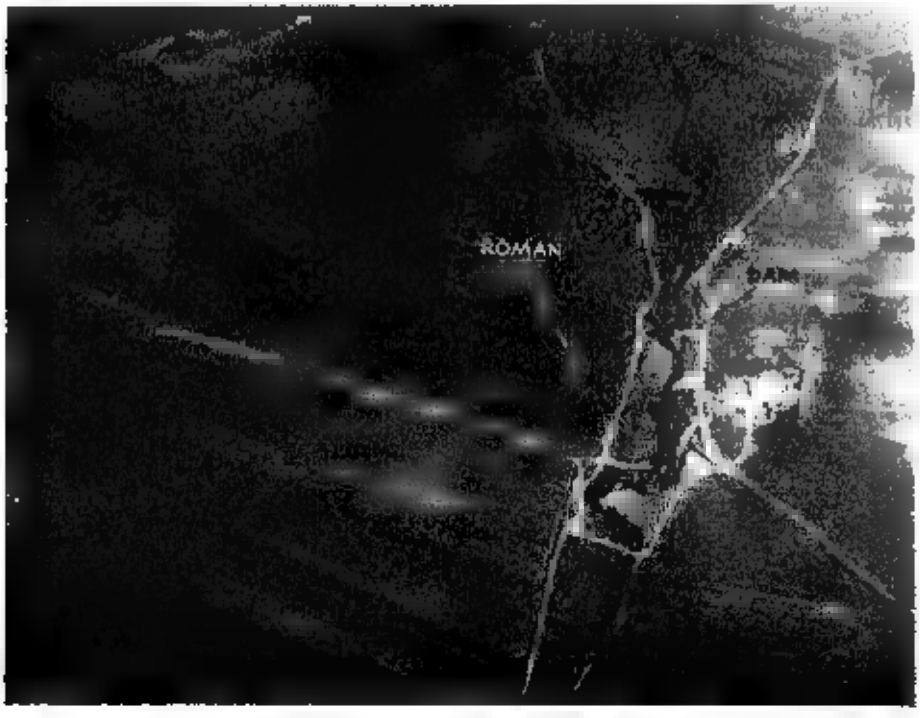
THE LUCUS FERONIAE AREA FROM THE EAST (*cf.* fig. 22)



a. Lucus Feroniae : Forum from the South-West

b. Lucus Feroniae : Amphitheatre

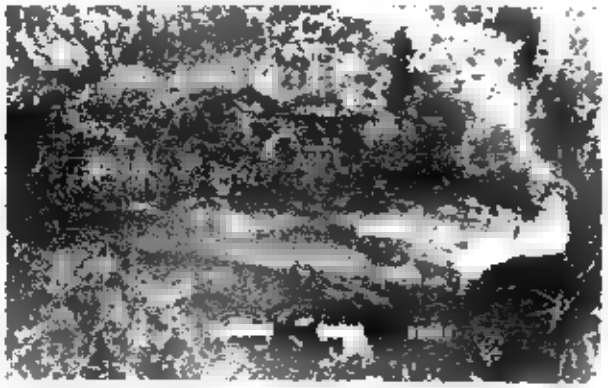
a. The Via Tiburina just North of Lucus Feroniae *(arrows mark line of road)*



b. Lucus Feroniae : The Aqua Augusta Dams

(Photos: Aerofototeca del Ministero)

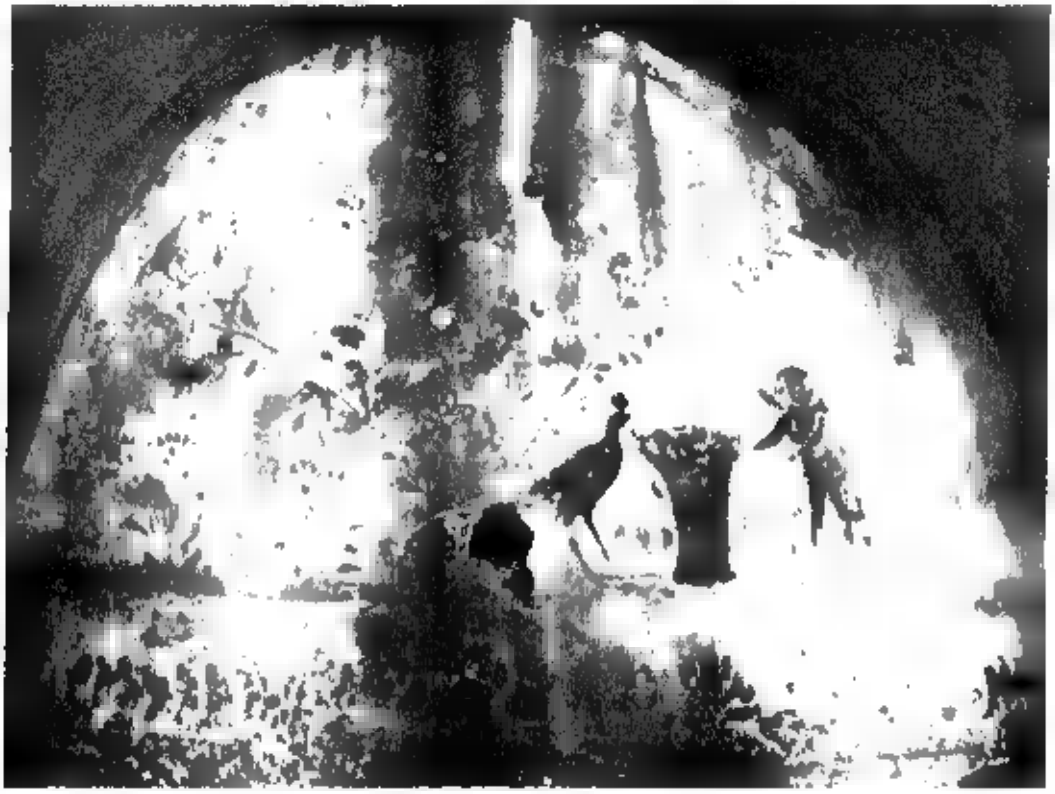
a. The Aqua Augusta Dam Area, from the West (*cf.* fig. 23)



b. Siphon-Pipe Aqueduct

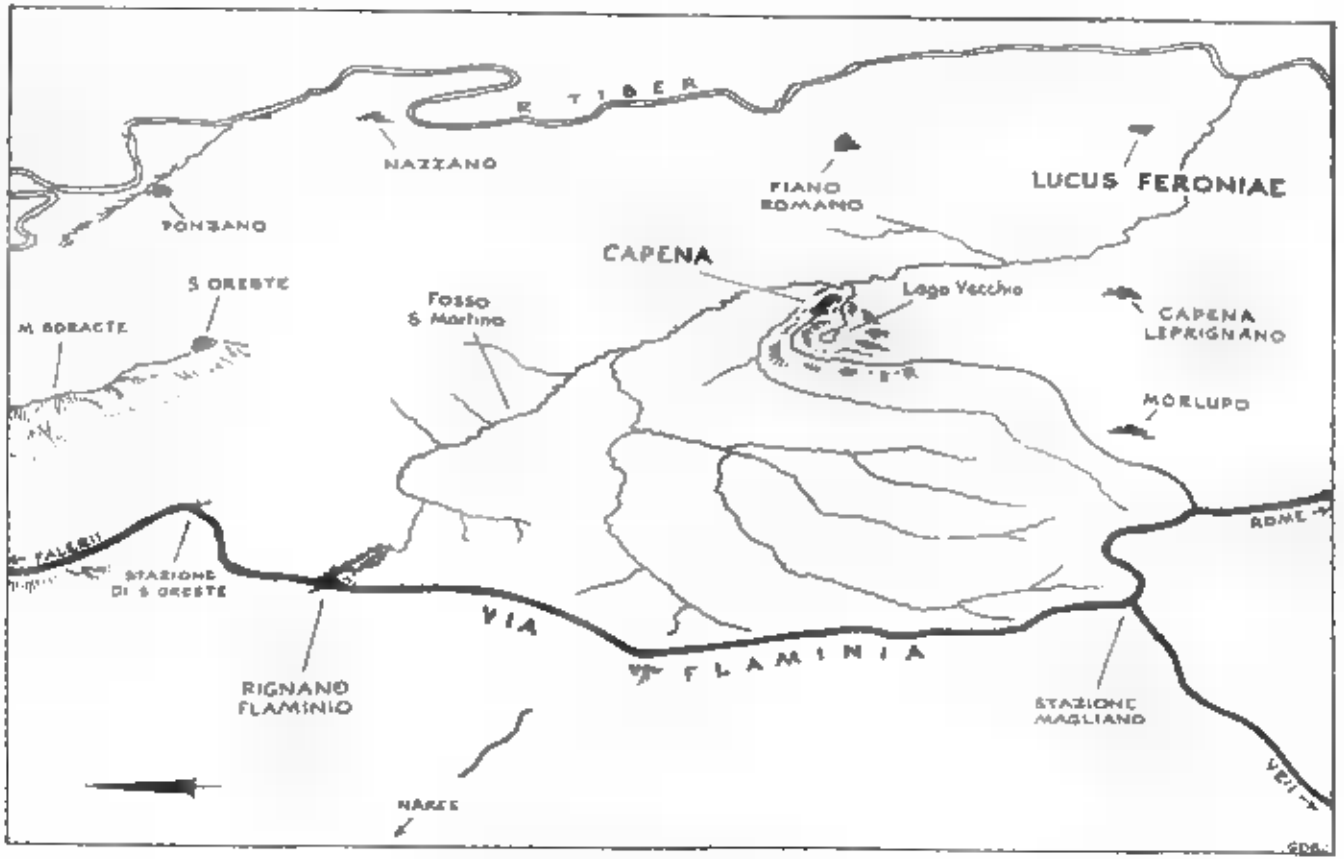
c. Twin-Channel Aqueduct (*cf.* fig. 24)

PLATE XXXIX



a. Site 194. Interior of Painted Tomb

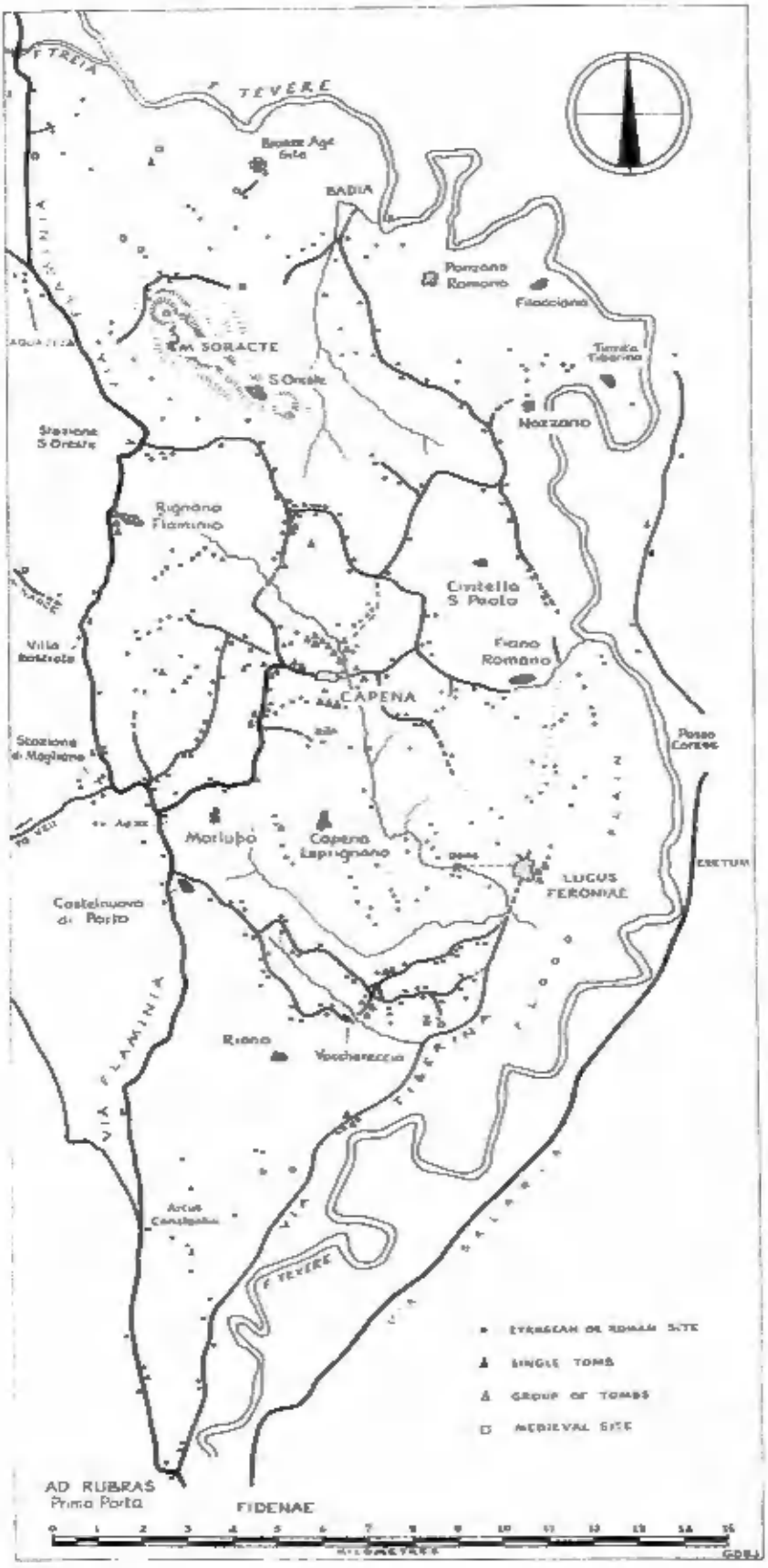
b. Painted Plate from Capena (p. 142; *cf.* fig. 8, 3)

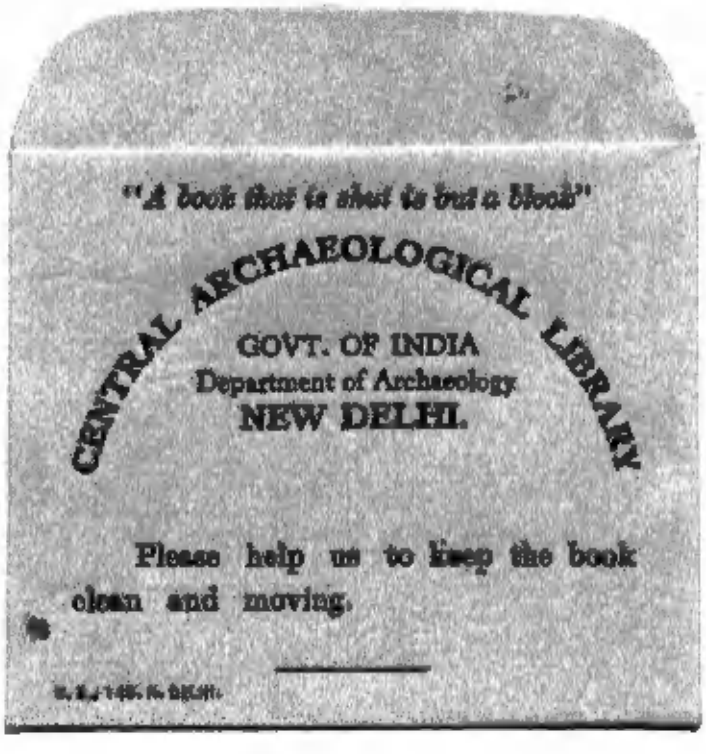


The Central Ager Capenas — West

The Monte Palombo Area (*cf.* pl. XXVIII)

PLATE XLIII


F TREIA
F TEVERE
Basilica Apollinis
BADIA
Pompeo Romano
Filacciano
M. SORACTE
S. Oreste
Tenuta Tiberina
Nazzano
Stazione S. Oreste
Rignano Flaminio
Cintella S. Paolo
Fiano Romano
CAPENA
Stazione di Magliano
Morlupo
Capena Lapedicano
LUCUS FERONIAE
Castelnuovo di Porto
Riano
Vescherecchia
VIA FLAMINIA
VIA TIBERINA
Arcus Constantini
F TEVERE
AD RUBRAS
Prima Porta
FIDENAE
ETRUSCAN OR ROMAN SITE
SINGLE TOMB
GROUP OF TOMBS
MEDIEVAL SITE
KILOMETRES


"A book that is shut is but a block"
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Department of Archaeology
NEW DELHI.
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